

NOT YET SCHEDULED FOR ORAL ARGUMENT**Appeal No. 17-7035****(Consolidated with Appeal No. 17-7039)**

United States Court of Appeals**FOR THE DISTRICT OF COLUMBIA CIRCUIT**

American Society for Testing and Materials; National Fire Protection
Association, Inc.; and American Society of Heating, Refrigerating,
and Air Conditioning Engineers, Inc.,

Appellees,

v.

Public.Resource.Org, Inc.,

Appellant.

Appeal from the United States District Court for the District of Columbia
Hon. Tanya S. Chutkan
1:13-cv-1215-TSC
1:14-cv-0857-TSC

**PUBLIC APPENDIX – MATERIAL UNDER SEAL
IN SEPARATE SUPPLEMENT
VOLUME 6 (JA2882-JA3463)**

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I, hereby certify that on January 31, 2018, I electronically filed the foregoing **Appendix** with the Clerk of the United States Court of Appeals for the District of Columbia Circuit by using the appellate CM/ECF system. I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

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Resistance to High Stakes Testing Spreads

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Thu, 08/23/2012 - 9:55pm

Resistance to High Stakes Testing Spreads

A national resolution to limit standardized testing is gathering support.

By: Bob Schaeffer

District Administration, September 2012

Resistance to High Stakes Testing Spreads Members of the American Federation of Teachers react to comments made at their annual conference this past summer in which AFT President Randi Weingarten stated that high-stakes testing should be used to inform, not impede, instruction. AFT unanimously passed a resolution that says the focus on standardized tests has undermined the nation's education system.

A rising tide of protest is sweeping across the nation as growing numbers of parents, teachers, administrators and academics take action against high-stakes testing. Instead of test-and-punish policies, which have failed to improve academic performance or equity, the movement is pressing for broader forms of assessment. From Texas to New York and Florida to Washington, reform activists are pressing to reduce the number of standardized exams. They also seek to scale back the consequences attached to test scores and use multiple measures to evaluate students, educators, schools and districts.

The nation's second-largest teachers union also took a stand recently against high-stakes testing, passing a resolution in July at its annual convention in Detroit that says the focus on standardized tests has undermined the United States' education system. The American Federation of Teachers approved the resolution unanimously, stating that testing should be used to inform and not to impede classroom instruction. "It's time to restore balance in our schools so that teaching and learning, not testing, are at the center of education," stated AFT President Randi Weingarten. "Test-driven education policies continue to force educators to sacrifice time needed to help students learn to critically analyze content and, instead, focus on teaching to the test. And students lose out on rich learning experiences when districts cut art, music, sports, social studies, science and other subjects to focus strictly on math and reading tests."

Of course, opposition to high-stakes testing is not new. In the early years of NCLB and state-mandated exams, scattered boycotts of those tests took place in communities such as Scarsdale, N.Y., and Cambridge, Mass. What is very different in 2012 is the breadth and depth of the protests. Never before have large numbers of school board members, administrators, principals and parents stood up to challenge testing policies.

The current movement gained significant momentum, oddly enough, in Texas, the state where many high-stakes testing practices began. The catalyst was a January 2012 statement by Robert Scott, the former state superintendent of schools who left the office in July, in which he called the belief that standardized testing is the "end-all, be-all" of education a "perversion." Scott also labeled "the assessment and accountability regime" not only "a cottage industry but a military-industrial complex." Almost immediately, local school boards began endorsing resolutions charging that overreliance on high-stakes exams is "strangling" classrooms. So far, nearly 550 local school boards in Texas have signed on, including those in big cities such as Dallas, Houston and San Antonio as well as those in hundreds of smaller communities. All told, these school boards represent districts that are responsible for educating 3.3 million Texas students, or more than half of the state's public school enrollment.

Meanwhile, in New York state, more than 1,400 principals from urban, suburban and rural schools signed a letter protesting the state's new test-centric teacher-evaluation policy. Their statement concludes with a reminder that a 2011 report by the National Research Council found that the past decade's emphasis on testing had produced little learning progress. A series of errors in writing, administering and scoring this year's New York State Regents exams accelerated the movement. Most notorious was "Pineapplegate" in which several questions on the exam about a poorly written reading passage titled "The Hare and the Pineapple" had no coherent answers.

A National Resolution Is Born

Responding to the enthusiastic embrace of the Texas resolution and educators' statements, the National Center for Fair and Open Testing (FairTest) spearheaded an effort this past spring to craft a statement that would appeal to a broader audience. The result, the National Resolution on High-Stakes Testing, gained initial sponsorship from a dozen other education, civil rights and religious groups, including the NAACP Legal Defense Fund and Educational Fund, the United Church of Christ's Justice and Witness Ministries, Parents Across America and the National Education Association. Many local groups, including Time Out from Testing in New York City and Parents United for Responsible Education in

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The resolution urges state officials to "reexamine school accountability." It calls for a system "which does not require extensive standardized testing, more accurately reflects the broad range of student learning, and is used to support students and improve schools." It also asks Congress and the Obama administration to overhaul NCLB. At the federal level, the resolution's goal is "to reduce the testing mandates, promote multiple forms of evidence of student learning and school quality in accountability, and not mandate any fixed role for the use of student test scores in evaluating educators."

As of mid-June, more than 10,000 individuals from all 50 states and 350 organizations, including the National Council of Teachers of English and parents groups in Tucson, Baton Rouge, Minneapolis and Charlotte, had signed the resolution.

The National Resolution, in turn, has stimulated activists in several regions to press for their own versions. In Florida, another state where high-stakes testing had long dominated the education reform debate, a dozen countywide school boards signed on within a three-week period. Endorsers included Broward County Public Schools, the nation's sixth-largest district, and the School District of Palm Beach County. With grassroots resolutions sweeping the state, the Florida School Board Association took up a version at its annual conference last spring. Despite a condescending lecture from the state education commissioner warning delegates against passage, they voted to adopt it overwhelmingly, even though they are still legally required to administer the controversial FCAT exam.

And, three school boards in the Tulsa, Okla., area, as well as boards in Ohio and Virginia, endorsed the resolution. The national Parent Teacher Association issued a statement noting that its policy positions were consistent with the resolution.

Boycotts Pepper the Nation

Diane Ravitch, research professor of education at New York University, speaking at the NCTM regional conference this past summer, discussing the impact of school reforms. Aside from extensive media coverage about the movement, New York parents this past spring organized a boycott of a "field test" designed to try out potential questions for future exams. Parents at more than five dozen schools refused to allow their children to take the trial exams.

Boycotts also spread in other states, including Colorado and California. In Snohomish (Wash.) School District, 550 parents stopped their children from taking the Measurements of Student Progress test, the state's exam for third- through eighth graders, and are working to promote test refusal in other communities.

What's behind the surge of criticism of high-stakes testing and support for assessment alternatives? Several forces are at work. First, and most important, is the widespread recognition that test-driven education "reform," embodied by NCLB and state graduation tests, has failed. Multiple statistical studies, such as FairTest's report "NCLB's Lost Decade for Educational Progress," have shown that federally mandated testing did not increase average academic performance or narrow achievement gaps significantly. In fact, U.S. students made greater gains on the National Assessment of Academic Progress (NAEP) before NCLB became law. Reports by independent experts, including the National Research Council, have found little evidence that proves high-stakes testing has improved academic performance among students.

Second, parents and educators saw that test-driven schooling damaged educational quality and equity by narrowing curriculum and focusing on the limited skills that standardized tests measure. These negative effects fell most heavily on classrooms serving low-income and minority children.

Third, a series of errors in test construction, administration, scoring and reporting damaged the industry's credibility. The public now understands that the tools politicians mandate to enforce educational "accountability" are produced by unaccountable companies focused on generating profits, not helping children learn.

Finally, test-cheating scandals have undermined confidence in policies that rely on standardized exams. Investigations in Atlanta, Baltimore, Denver, El Paso, Houston, Indianapolis and New York City have shown that many highly promoted gains resulted from score manipulation. Improper behaviors range from erasing wrong answers to barring certain students from school on testing days. According to FairTest, cheating cases have been confirmed in 36 states and the District of Columbia over the past four years.

The Alternatives

Robert Scott, former Texas education commissioner, publicly stated that the idea that high-stakes testing was the end-all, be-all was a "perversion," creating a greater push for the movement. Overwhelmed by the evidence, defenders of high-stakes testing typically fall back on one last-ditch argument: "So what's the alternative?"

However, many concrete proposals made by groups like FairTest, the Forum on Educational Accountability, and the Broader, Bolder Approach to Education have demonstrated that better methods for evaluating student progress already exist. Assessment based on student performance on real learning tasks is more useful and accurate for measuring achievement than any multiple-choice test.

Trained teams of educators can also be used to rate academic performance. Such a process is already used to grade the non-multiple-choice portions of Advanced Placement exams. Studies have shown that with training, the level of agreement on grading among judges is high. As with multiple-choice tests, safeguards are necessary to ensure that race, class, gender, linguistic or other cultural biases do not affect evaluation.

The United States is the only economically advanced nation that relies heavily on multiple-choice tests. Other nations, such as Finland, primarily use performance-based assessments. Their students are evaluated based on real academic work such as essays, projects and activities. Ironically, because these nations do not focus on teaching to multiple-choice exams, they even score higher than U.S. students do on those tests, as several researchers, including Finnish policy analyst Pasi Sahlberg, have demonstrated.

Using Campaign to Close Gap

Why, then, do so many public officials continue to advocate high-stakes testing? The major problem is a disconnect between the views of voters and educators on the one hand, and politicians and their high-dollar supporters—particularly the Broad, Gates and Walton foundations—on the other. Public opinion polls consistently show support for cutting back on high-stakes testing. But policy makers and their close supporters continue to defend the status quo, even though the evidence reveals that it has not succeeded.

This past summer and this fall, the assessment reform groups who initiated the National Resolution are using the election campaign season to close that gap. The groups plan to press all candidates for Congress, local offices and even as high as the president to take public positions against test misuse and overuse.

In St. Petersburg, Fla., voters convinced seven of eight contenders for the Pinellas County School Board to support a statement opposing high-stakes standardized exams. By “bird-dogging” candidate forums, publishing letters-to-the-editor in local media, commenting on political blogs, and asking pointed questions, advocates expect to deliver a clear message to those who ultimately make assessment policy.

Leaders of the testing reform movement are realists. They know that a winning campaign requires more than one resolution or a single electoral cycle. They are confident, however, that the increasing power of public opinion will ultimately lead policy makers to roll back excessive high-stakes standardized exam mandates and finally adopt better forms of assessment.

Last May, California Senate President Pro Tem Darrell Steinberg speaks with Sen. Elaine Alquist after his school testing bill, SB1458, was approved by the Senate. The bill, which makes schools less reliant on student testing, is part of a larger education package under consideration. If passed in the Assembly, it would need governor approval. Last May, California Senate President Pro Tem Darrell Steinberg speaks with Sen. Elaine Alquist after his school testing bill, SB1458, was approved by the Senate. The bill, which makes schools less reliant on student testing, is part of a larger education package under consideration.

Bob Schaeffer is the public education director of the National Center for Fair and Open Testing. Colleagues Monty Neill and Lisa Guisbond contributed to this article.

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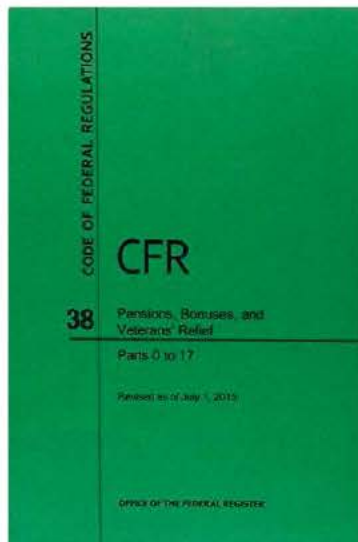
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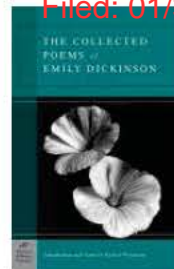


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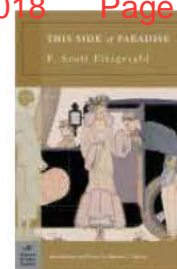


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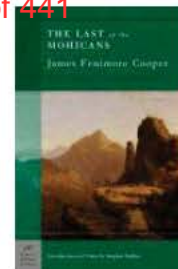
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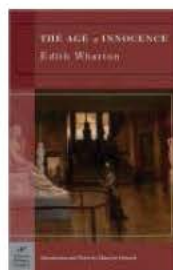
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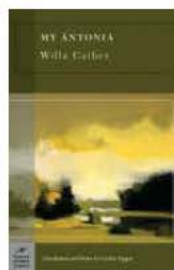


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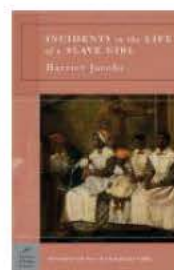


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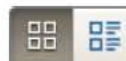
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**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

AMERICAN EDUCATIONAL RESEARCH
ASSOCIATION, INC., AMERICAN
PSYCHOLOGICAL ASSOCIATION, INC., and
NATIONAL COUNCIL ON MEASUREMENT IN
EDUCATION, INC.,

Plaintiffs,

v.

PUBLIC.RESOURCE.ORG,

Defendant.

Case No. 1:14-CV-00857-TSC-DAR

**DECLARATION OF CARL
MALAMUD IN SUPPORT OF
DEFENDANT-COUNTERCLAIMANT
PUBLIC.RESOURCE.ORG'S MOTION
FOR SUMMARY JUDGMENT AND
OPPOSITION TO PLAINTIFFS'
MOTION FOR SUMMARY
JUDGMENT AND PERMANENT
INJUNCTION**

Action Filed: May 23, 2014

I, Carl Malamud, declare as follows:

1. I am over the age of 18 years and am fully competent to testify to the matters stated in this declaration.
2. This declaration is based on my personal knowledge. If called to do so, I would and could testify to the matters stated herein.
3. I am the President and sole employee of Public.Resource.Org, Inc. (“Public Resource”), which is a 501(c)(3) non-profit corporation headquartered in Sebastopol, California. I have worked at Public Resource since I founded the organization in 2007. It is my only source of employment.
4. Public Resource’s core mission is to make the law and other government materials more widely available so that people, businesses, and organizations can easily read and discuss our laws and the operations of government. Attached to Public Resource’s Consolidated Index of Exhibits as **Exhibit 1** is a true and correct copy of Public Resource’s Articles of Incorporation from our website at <https://public.resource.org/public.resource.articles.html>.
5. That mission grows out of my longtime professional commitment to improving public access to essential documents that shape our fundamental activities. In 1991, I convinced the Secretary-General of the International Telecommunication Union that the Blue Book, the specification for how telephone networks operate, should be freely available on the Internet. Working with Dr. Michael Schwartz, I transformed and posted the Blue Book into formats compatible with modern publication technologies and made it available on the Internet. The service was extremely popular, and the ITU today makes all of its standards documents freely available on the Internet. I wrote a book about

this experience called “Exploring the Internet” (Prentice Hall, 1993). That book can be viewed and read at http://museum.media.org/eti/Exploring_the_Internet.pdf.

6. I was privileged to be able to participate in the Internet Engineering Task Force, the standards body that has developed most of the standards that specify the functioning of the Internet, during the early 1990s, a period of very rapid development, both in the functionality of the Internet and its scope.

7. In 1993, when the Internet was beginning to grow explosively, I created the first radio station on the Internet, operating as a nonprofit corporation called the Internet Multicasting Service. In addition to transmitting audio and video programming, the service also provided the first high-speed Internet link into the White House, using a temporary infrared connection from our studios in the National Press Building. The radio service, which I dubbed “Internet Talk Radio,” became a member of the Public Radio Satellite System, received accreditation from the U.S. House and Senate Radio & Television Correspondents Galleries, sent out live audio from the floors of the House and Senate, streamed all National Press Club luncheons, and transmitted original programming. Many of those programs can still be listened to at <http://museum.media.org/radio/>.

8. At the Internet Multicasting Service, I also put a number of important government databases online, including the Securities and Exchange Commission EDGAR database and the U.S. Patent database. When the SEC took the EDGAR service over from me, I loaned it computers and donated all of our source code so they could be up and running quickly. The SEC ran the system on our software for several years. On

October 10, 1995, the Hon. Arthur Levitt, Chairman of the SEC, wrote to me thanking us for our efforts and calling the project an “extraordinary achievement.”

9. After I started Public Resource in 2007, one of our first efforts was to place online the historical opinions of the U.S. Courts of Appeals, material that was not previously available on the Internet. Public Resource also converted all of the opinions in the first 40 volumes of the Federal Reporter as well as the Federal Cases into Hypertext Markup Language (HTML) and placed those online. These materials are now used by numerous websites that provide access to legal materials.

10. Public Resource maintains an archive of laws and other government authored materials on several domains under the public.resource.org website.

11. Public Resource has helped increase access to many other court documents. We scanned approximately 3 million pages of briefs submitted to the U.S. Court of Appeals for the Ninth Circuit dating back to the creation of that court and have placed those materials online. The materials may be downloaded from <https://law.resource.org/pub/us/case/ca9/>.

12. Public Resource has conducted a number of other projects that have resulted in more government information being placed online. Using volunteers in Washington D.C. with the cooperation of the Archivist of the United States, we put approximately 6,000 government videos on YouTube and the Internet Archive for people to use with no restriction, a service we call FedFlix. It has had over 60 million views. The videos may be viewed at <https://www.youtube.com/user/PublicResourceOrg> and <https://archive.org/details/FedFlix>.

13. Public Resource also placed over eight million Form 990 exempt non-profit organization returns obtained from the IRS on the Internet. As part of that posting, we conducted an intensive privacy audit which led to fundamental changes in how the IRS deals with privacy violations. Through a Freedom of Information Act request and litigation, we obtained release of high-quality versions of Form 990 filings, which the IRS had refused to make available. The court decision in that case (*Public.Resource.Org v. United States Internal Revenue Service*, No. 3:13-cv-02789-WHO, ECF No. 62 (N.D. Cal. January 29, 2015)) led to a recent announcement by the IRS that all e-file returns will be made available in bulk in 2016. I am pleased to be working with the IRS as a member of the test group for this service.

14. In 2007, I wrote a report addressed to Speaker of the House Nancy Pelosi suggesting that video from Congressional hearings should be more broadly available on the Internet. On January 5, 2011, Speaker John Boehner and Representative Darrell Issa wrote to me asking me to assist them in carrying out that task. In a little over a year, Public Resource was able to put over 14,000 hours of video from hearings on the Internet, to assist the House Committee on Oversight and Government Reform in posting a full archive of their committee video and, for the first time ever for congressional hearings, to provide closed-captioning of those videos based on the official transcripts. The letter from Speaker Boehner may be found at <https://law.resource.org/rfcs/gov.house.20110105.pdf>.

15. Also in 2008, I examined the issue of availability of state-mandated safety codes, such as building, electric, plumbing, and fire codes. At the time, none of those documents were available freely on the Internet. I made a detailed survey of state

regulations and statutes, looking for direct and specific incorporation of particular model codes. Over the next few years, Public Resource posted many of the incorporated state safety codes for U.S. states.

16. Public Resource's process of posting these codes has been deliberate and careful and has grown in sophistication over time. First, we purchased paper copies of codes that are incorporated into law. Then, we scanned the documents, applied metadata and optical character recognition (OCR) to the PDF files, and placed a cover sheet on each document explaining that this was a posting of the law of a specific jurisdiction.

17. Over time, we also began converting some of these standards into modern HTML format, including setting the tables, converting formulas to Mathematics Markup Language (MathML), and converting graphics to the Scalable Vector Graphics (SVG) format. Coding formulas in MathML makes them significantly more accessible to people who are visually impaired. Converting the graphics to SVG means they can be resized smoothly, and can be incorporated into graphic editing programs and word processing programs. Converting the documents into standard HTML means the documents can be more readily used on different platforms, such as tablets and smartphones.

18. In late 2008, I was asked by the Obama-Biden Transition Project to consult on the subject of how the Official Journals of Government could be made more readily available. Many of my recommendations were adopted, including removing the subscription fee from bulk access to the Federal Register. That led to a dramatic transformation of the Federal Register, which is now based on open source software that was developed by three volunteers in California and then adopted by the government. That system can be viewed at <https://federalregister.gov/>. A copy of my memorandum to

the Obama Transition Project may be viewed at

<https://public.resource.org/change.gov/reboot.register.pdf>.

19. In 2011, I began to look seriously at the federal use of standards incorporated by reference into the Code of Federal Regulations. I was participating at the time as an appointed member of the Administrative Conference of the United States, and I carefully read materials such as the legislative history of the mechanism of incorporation by reference, the Code of Federal Regulations provisions for incorporation by reference, and cases such as the *Veeck* decision.

20. In 2012, I began a new initiative to make standards incorporated by reference into federal law available on the Internet. I examined the Code of Federal Regulations carefully and selected 73 standards that spanned a variety of agencies. I purchased physical copies of each of these standards. I created 25 paper replicas of each of these standards, and placed a cover sheet on each one indicating which section of the CFR incorporated the document.

21. To accompany the 73 standards, I also created a detailed cover memo, titled "Notice of Incorporation," which included letters addressed to seven senior government officials. The memo included a request for comments from each of the ten standards development organizations (SDOs) named in the document by May 1, 2012. The plaintiffs in this case were not among the ten SDOs named in the document. I packaged the 73 standards, the Notice of Incorporation, two posters, and other materials in 29-pound boxes and sent the boxes to the seven government officials and the ten SDOs. I sent the boxes by Federal Express on March 15, 2012. A copy of the Notice of

Incorporation memo may be found at https://law.resource.org/pub/us/cfr/notice.sdo.20120315_to.pdf.

22. After sending the standards, I received acknowledgements from several government addressees, including personal notes from the Chairman of the Federal Trade Commission, the Archivist of the United States, and the Chairman of the House Committee on Oversight and Government Reform. I did not receive any response from the SDOs.

23. On May 1, 2012, I posted the 73 documents on the Public Resource web site. I also began a process of examining the Code of Federal Regulations, the National Institute of Standards and Technology (NIST) database of Standards Incorporated by Reference (SIBR), and the Office of the Federal Register's incorporation by reference listings to put together a list of documents that are incorporated into the CFR. I then began the process of trying to procure these documents, many of which are unavailable for purchase from the SDOs and which I had to obtain on the used book market.

24. Every standard that I have posted on my website has been incorporated into law by a governmental authority. Public Resource does not impose any restrictions on the use of the standards. Public Resource has never charged for access to the standards or other legal materials, and has never asserted any intellectual property rights in them. We do not require people to log in or register before accessing content from Public Resource.

25. Public Resource posted a PDF version of the 1999 Standards on its website. The PDF version accurately appeared as a scan of a physical version of the incorporated standard. Public Resource's regular practice is to perform OCR on the

incorporated standards that it posts and to convert them further into standard Hypertext Markup Language (HTML) to make them still more accessible. I intended to do so for the 1999 Standards, but I suspended further work on the 1999 Standards when this lawsuit was filed. In May 2014, Plaintiffs sued Public Resource for posting on its website and the Internet Archive website the 1999 Standards. Subsequently, so as to ensure that this lawsuit would be decided on a full record, in June 2014 Public Resource agreed to take down the versions of the 1999 Standards that it had posted on its website and on the Internet Archive website, pending the resolution of this case

26. Public Resource has continued to develop techniques for making the documents that we post more usable, including double-keying and adding markup to HTML and SVG versions of the documents. Double-keying means having two separate typists copy the text of the incorporated standard; the results are then compared in order to eliminate any errors. We have also developed new markup techniques that increase the accessibility of the documents to people with visual impairments and print disabilities. We have also made significant advances in adding metadata to the documents, so each section, table, figure, and formula can be bookmarked and linked to, making internal navigation within the documents significantly friendlier for the user.

27. We have applied these markup techniques to a number of standards incorporated by reference, though not to the 1999 Standards. Public Resource's goal is to have the entire CFR, including all documents incorporated by reference, available in this new format so that users can seamlessly and transparently navigate the entire CFR. I believe this will be useful for employees of affected business enterprises, researchers and journalists covering public policy issues, government workers at the federal, state, and

local levels who must interact with the code as part of their daily activities, and for interested citizens.

28. We have made several examples of our new approach available on the Internet and submitted them as examples of how the law can be made better in formal comments to Notices of Proposed Rulemaking that propose to incorporate standards by reference.

29. Public Resource's website is structured for navigation by search engines and for bulk access. Data are organized by country (e.g., /pub/us/) then by type of data, such as standards incorporated by reference (/pub/us/cfr/ibr/).

30. Public Resource has one employee, myself, and three contractors who assist me in systems administration, conversion of graphics and formulas, and legal advice. Our core operating costs are under \$500,000 per year, and we are funded entirely by donations, contributions and grants. Rather than adding staff, I have prioritized capital expenses, such as the purchase of the U.S. Court of Appeals backfile for \$600,000 and the scanning of 3 million pages of Ninth Circuit briefs. Public Resource does not accept donations that are tied to the posting of specific standards or groups of standards. Public Resource's operating income is not based on the amount of traffic its websites receive. Though we are a small organization, we observe all current best practices of corporate governance and transparency. I am proud that we have been awarded the GuideStar Gold Seal for nonprofit transparency. A full repository of our financials and other disclosures is maintained at <https://public.resource.org/about>.

31. Public Resource has never sought benefit or compensation from its posting of the 1999 Standards. We have never used the 1999 Standards for marketing.

32. I pay a great deal of attention to quality control, including verifying the validity of the HTML, SVG, and MathML that I post. I respond immediately to any reports of errors from the public.

33. To Public Resource's knowledge, the 2014 edition of the Standards For Educational and Psychological Testing has not been incorporated by reference into law. Public Resource posts *only* those standards that have become law. Consistent with this policy, Public Resource has no plans to post the 2014 Standards on the Internet.

34. My work at Public Resource, including the posting of standards incorporated by reference into federal and state law and my efforts to post briefs, opinions, regulations, statutes, and other materials that are edicts of government, are based on a long-held belief that the primary legal materials of our country must be available to all, especially those who lack the means to access the law in the status quo, because an informed citizenry is the key to the functioning of our democracy.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Executed this 21st day of January, 2016 at Sebastopol, California.



Carl Malamud

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EXHIBIT 39

Standards for Educational and Psychological Testing
Sales Report, 1999 Edition



Period	Notes	No. of Units
FY 1999	est.	1,768
FY 2000	est.	3,797
FY 2001	est.	3,755
FY 2002	est.	5,592
FY 2003	est.	3,310
FY 2004	est.	3,218
FY 2005	Actual	3,803
FY 2006	Actual	3,888
7/1/06-12/31/06	Actual	2,144
FY 2007	Actual	3,077
FY 2008	Actual	3,358
FY 2009	Actual	2,590
FY 2010	Actual	3,043
FY 2011	Actual	2,132
FY 2012	Actual	1,649
FY 2013	Actual	1,732
FY 2014	Actual	855
Total Units Sold		49,710

Note: Estimates are based on revenue earned and reported.

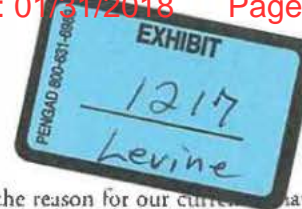
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**Standards for Educational and Psychological Testing
Sales Report**

Period	Notes	No. of Units	Notes	Inventory EOY
FY 2000	est.	3,797		
FY 2001	est.	3,755		
FY 2002	est.	5,592		
FY 2003	est.	3,310		
FY 2004	est.	3,218		
FY 2005	Actual	3,803	est.	6,937
FY 2006	Actual	3,888	est.	3,049
7/1/06-12/31/06	Actual	2,144	est.	905
FY 2007	Actual	3,077	est.	2,828
FY 2008	Actual	3,358	est.	6,970
FY 2009	Actual	2,590	est.	4,380
FY 2010	Actual	3,043	est.	1,337
FY 2011	Actual	2,132	est.	4,705
FY 2012	Actual	1,649	est.	3,056
FY 2013	Actual	1,732	Actual	1,324
Total Units Sold		109,843		

EXHIBIT 44



Letters from page 4

"Sex" refers to biology (and yes, as Anne Fausto-Stirling brilliantly recounts, the dividing people into two biological sexes rather than more, or a continuum, is hugely problematic), and "gender" is the whole set of attitudes, feelings, interests, clothing and behavior that has been arbitrarily divided into "masculine" and "feminine," causing profound damage when people's attitudes, feelings and the rest are classified as either appropriate and normal or inappropriate and abnormal, depending on their biological sex. One way to prevent such damage is to make it crystal clear that one's sex should not be equated with and should not determine how one feels, thinks, dresses and acts. This cannot happen when the picture is blurred by the misuse of terms.

For instance, when a journalist writes in "Both sexes seek attractiveness in one-night stand partners" (April, *Monitor*) that "both genders prioritize

looks in their partners," the meaning is that people (of any sex) who are feminine and those who are masculine prioritize looks in their partners, not at all what was surely intended. This may be particularly confusing in light of research showing that both gay and straight men care more about partners' appearance than do women.

PAULA J. CAPLAN, PHD
Cambridge, Mass.

Evidence for the evolutionary?
I APPRECIATE BEING PART OF A scientific, research-based profession. Therefore I am disturbed when I read articles such as "Bonding over others' business" by Zak Stambor in the April *Monitor*. At least 20 percent of the article was dedicated to speculating about the possible psychological behavior of our caveman ancestors. We have no data about this matter, and never can have it. The author and those he cites take our supposed reasons for gossip today, project them back on hypothetical ancient conditions and say that is

the reason for our current behavior. Are we inventing a folklore of prehistory for ourselves? We would do better to limit ourselves to what is observable and testable.

CAROLYN E. KERR, PHD
Sevilla, Spain

CORRECTIONS

The roster of Centering on Mentoring task force members in the May 2006 president's column listed Haydee M. Cuevas, PhD, as having obtained her degree in 1904. She received her degree in 2004.

On page 35 of the June *Monitor*, Michael Scheier, PhD, is incorrectly listed as the speaker delivering the address, "Social and Psychological Predictors of Susceptibility to the Common Cold." Sheldon Cohen, PhD, is delivering the address. Scheier is chairing the session.

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5. Test Administration, Scoring, and Reporting
6. Supporting Documentation for Tests

PART II FAIRNESS IN TESTING

7. Fairness in Testing and Test Use
8. The Rights and Responsibilities of Test Takers
9. Testing Individuals of Diverse Linguistic Backgrounds
10. Testing Individuals with Disabilities

PART III TESTING APPLICATIONS

11. The Responsibilities of Test Users
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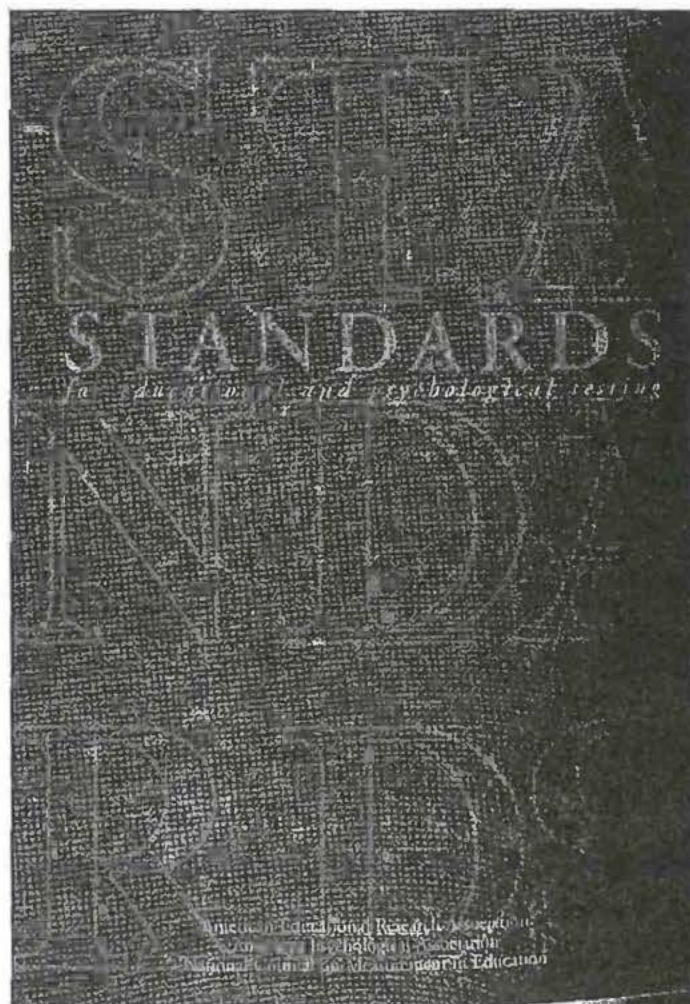
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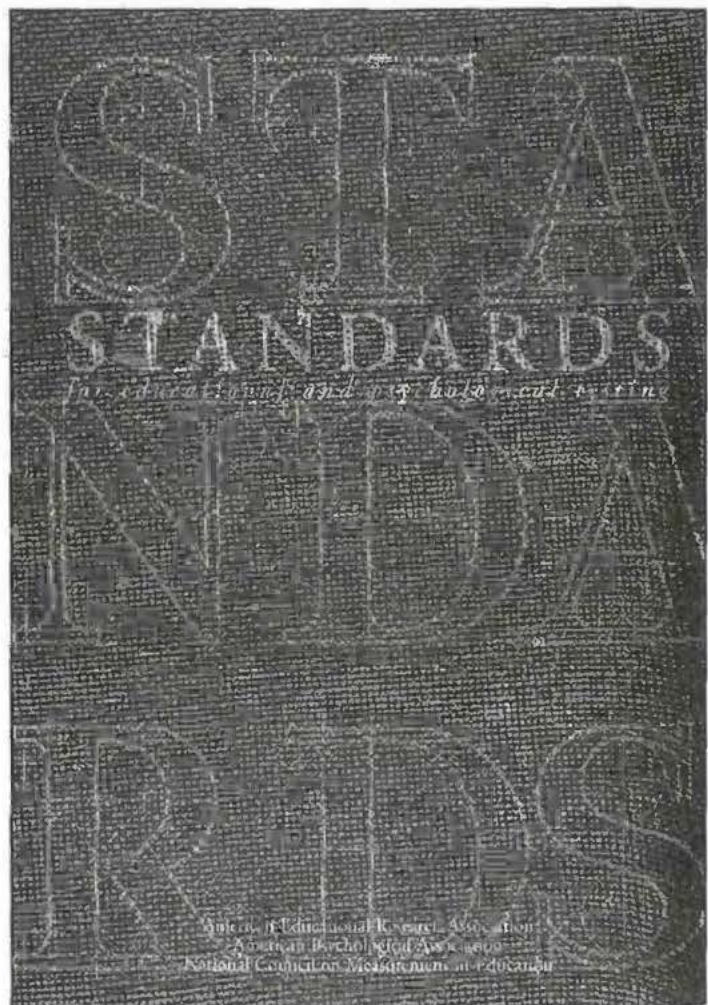


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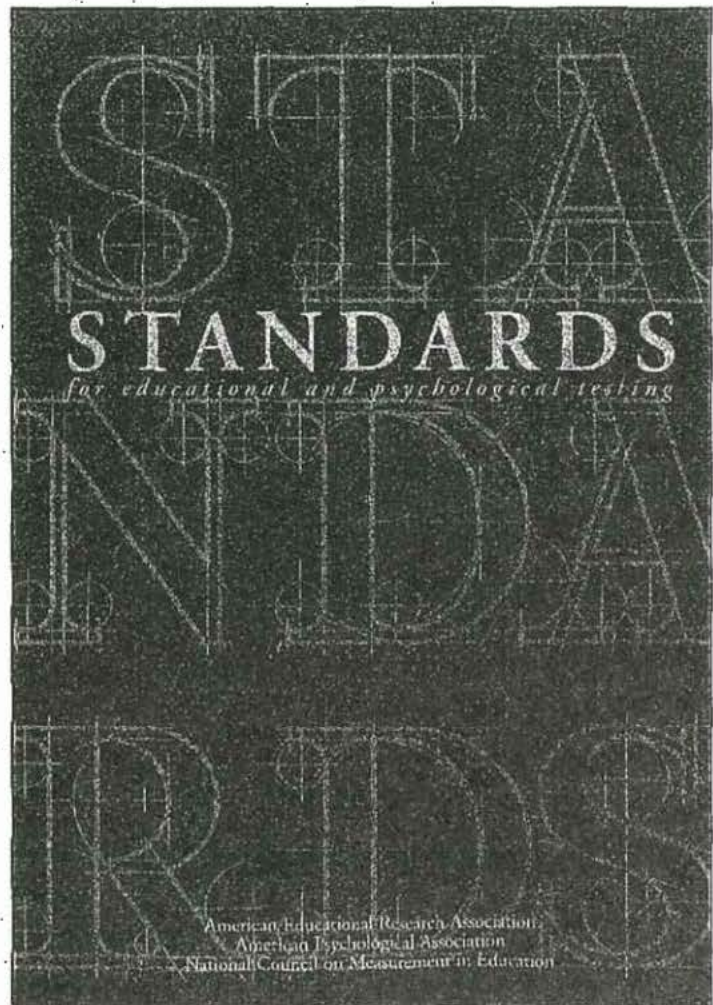


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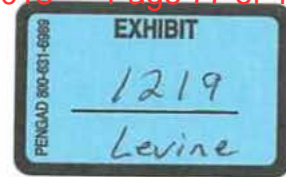
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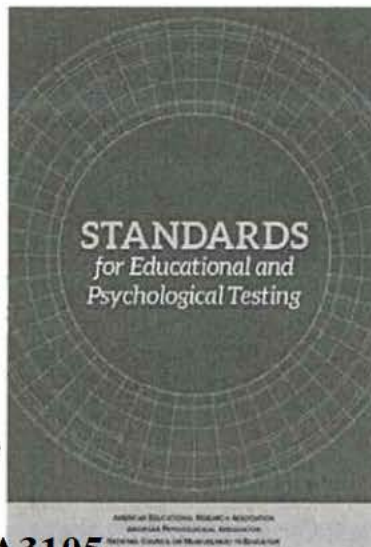
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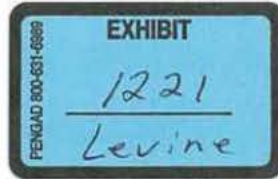
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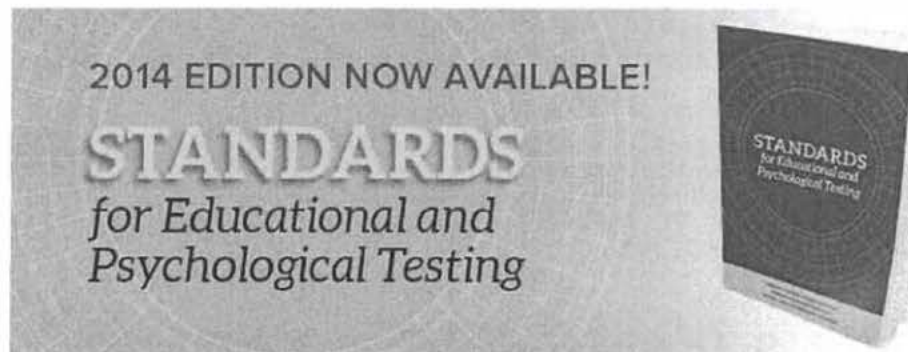
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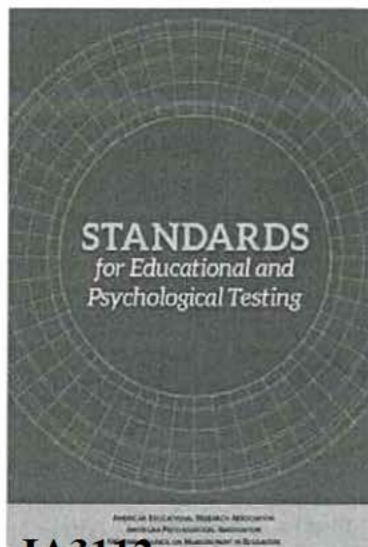
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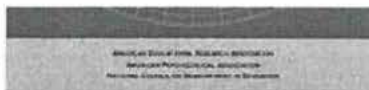
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**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

AMERICAN EDUCATIONAL RESEARCH
ASSOCIATION, INC., AMERICAN
PSYCHOLOGICAL ASSOCIATION, INC., and
NATIONAL COUNCIL ON MEASUREMENT IN
EDUCATION, INC.,

Plaintiffs/Counter-defendants,

v.

PUBLIC.RESOURCE.ORG, INC.,

Defendant/Counterclaimant.

Case No. 1:14-cv-00857-TSC-DAR

EXPERT REPORT OF JAMES R. FRUCHTERMAN

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Introduction

As an expert in accessibility of written materials for people who have disabilities that affect using standard print (people who are print disabled), I have been retained by Public.Resource.Org to evaluate the accessibility of certain content that had been available on the website of the defendant in this case. As someone dedicated to improving accessibility for the benefit of people with disabilities and in the public interest, I agreed to evaluate the accessibility to people who are blind of this specific commonly used standard document.

This expert report is a summary of certain opinions that I intend to give, if asked, at trial regarding the accessibility of specific documents to people who are blind or print disabled. This report also states the bases for my opinions, and it discloses the data or other information considered in forming those opinions. I reserve the right to change or supplement this report if additional evidence comes to my attention, and to prepare demonstratives and/or exhibits to illustrate or explain my opinions, as appropriate.

A copy of my curriculum vitae, including a list of my publications and presentations, is **Exhibit A** to this report. I provide my expertise in this case pro bono, and I am not receiving compensation for my time researching, writing this report, or testifying. I previously served as an expert in *The Authors Guild, Inc. et al. v. HathiTrust, et al.*, Case No. 1:11-cv-06351-HB (S.D.N.Y.) (case filed September 12, 2011) and I am serving as an expert in *American Society of Testing and Materials, et al. v. Public.Resource.Org*, Case No. 1:13-cv-01215-TSC-DAR, although I have not testified in either case. I have not given deposition or trial testimony in the past four years.

Background and Qualifications

I serve as Founder and Chief Executive Officer of Benetech, a nonprofit dedicated to creating new technology solutions that serve humanity and empower people to improve their lives. In 1980 I earned a B.S. in Engineering and an M.S. in Applied Physics from California Institute of Technology. I co-founded Calera Recognition Systems in 1982. Calera developed optical character recognition (OCR) technology that allowed computers to read virtually all printed text.

In 1989, I founded Arkenstone, a nonprofit social enterprise, which produced reading machines for the print disabled community based on the Calera technology, and was at one time the largest maker of affordable reading systems for the blind. The Arkenstone product line was sold in 2000 and the resulting capital funded the next phase of Arkenstone under its new name, Benetech. I have been the CEO of Benetech/Arkenstone since 1989.

I have served on three U.S. federal government advisory committees for disability issues: the Section 255 Telecommunications Access Advisory Committee, the Section 508 Electronic Information and Technology Access Advisory Committee, and the Advisory Commission on Accessible Instructional Materials in Postsecondary Education for Students with Disabilities. I have received numerous other awards and recognition for my work making print materials accessible to people who are blind or otherwise print disabled. In 2006 I received a MacArthur Fellowship. I was named an Outstanding Social Entrepreneur in 2003 by the Schwab Foundation and have frequently participated in the World Economic Forum Annual Meetings in Davos, Switzerland. Benetech received the Skoll Award for Social Entrepreneurship under my leadership. I also received the Migel Medal from the American Foundation for the Blind, the Robert F. Bray Award from the American Council of the Blind, and the American Library

Association's Francis Joseph Campbell Award in recognition of my successful efforts to make literary works more accessible to people who are blind or visually impaired.

What Does Accessibility Mean for a Person Who is Blind?

Accessibility is usually defined in a functional way: can a person with a disability independently access the same information and perform the same tasks as a person without a disability? When it comes to accessing materials traditionally available as print, such as standards, there are many groups of print disabilities. The most severe is blindness, where a person cannot perceive the printed text at all. The next is vision impairment, where a person generally cannot perceive the text directly or with corrective lens, but may be able to use magnifiers of different types to read the text. Another group is learning disabilities that interfere with reading, such as dyslexia. A closely related group of disabilities involve brain injuries that affect reading or the retention of material read. Another group is physical disabilities that interfere with the holding or seeing of books or the turning of pages.

In this report, I focused on the accessibility challenges that would be experienced by blind people, because they are generally the most severe print disabilities. The other groups of people with print disabilities use similar technologies to access print (such as having it read aloud), and experience similar challenges as blind people. In the accessibility field, it is generally understood that if you make information accessible to a blind person, it will probably also meet the accessibility needs of the great majority of people with other print disabilities.

The most common technology used by a blind person for accessibility is called a screen reader. As the name suggests, a screen reader is a program that runs on a personal computer or a smartphone that reads the information on the screen aloud (using a computer-synthesized voice)

to a blind person. The screen reader runs “on top of” other programs, figuring out not only what text is on the screen, but also the controls that are displayed: items such as buttons, menus, text-entry boxes and the like. Because of the amount of information on a complete screen, and its complexity, blind people need to be able to focus on the most important information so that they do not waste time listening to everything on the screen.

For the purpose of this report, measuring the accessibility of standards, I am assuming that the blind user is using a screen reader on top of a web browser or word processor program on a personal computer. Based on the information the screen reader can glean from the pages displayed on the screen, can a blind person locate the standard and read it?

The accessibility tasks I tested were designed to assess whether a blind user with basic assistive technology skills could perform the same kind of tasks one might expect a user without a disability to perform in accessing a given standard, without requiring the intervention of a third party. This functional approach is the most common method of assessing accessibility.

The specific tasks I investigated were:

- Could a blind user with basic assistive technology skills independently access a specific standard of interest?
- Could a blind user independently read the entire standard using assistive technology?
- Could a blind user independently navigate to a specific place in the standard and read the content in that place?
- Could a blind user independently do a full text search and find specific mentions of terms of interest?

I conducted these tests on a standards document that was represented to me as having been available on the Public.Resource.Org website. I primarily used the Window-Eyes screen reading software and the ABBYY FineReader optical character recognition software to perform my tests.

Locating an Accessible Version of the 1999 Standards

I was asked to review the accessibility of the 1999 edition of The Standards for Educational and Psychological Testing (hereafter, the “1999 Standards”) for people who are blind or otherwise print disabled. The first step in determining the accessibility of a document is to try to locate a version of the 1999 Standards that would be accessible to people who are blind or have print disabilities. I attempted to locate an accessible version of the 1999 Standards through two separate avenues: by searching the catalogs of the main libraries that serve people with print disabilities, and also by doing a standard Google search to try to locate an electronic version of the 1999 Standards. From my work with people who are blind or print disabled, I know that this would be the typical procedure that people who are blind or print disabled would perform when looking for an accessible version of a document.

The four main libraries that serve people with print disabilities are the American Printing House for the Blind, Bookshare (which I founded), Learning Ally, and the National Library Service for the Blind and Physically Handicapped, Library of Congress. I performed a thorough search of all four of these catalogs and found that the 1999 Standards were not available through any of these resources, either in an electronic form, or in mail-delivery braille or audio recording.

I then performed a Google search to attempt to locate an electronic version of the 1999 Standards online. I was unable to find an electronic version of the 1999 Standards online, but I did locate a used print version for sale on Amazon.com. I have been informed by counsel for

Public.Resource.Org that although Public.Resource.Org previously hosted an electronic version of the 1999 Standards on its website, it had been taken down during the course of this litigation. From my research I believe that a version of the 1999 Standards that is accessible to people who are blind or print disabled is currently unavailable to the public.

The unavailability of a version of the 1999 Standards that is accessible to people who are blind or print disabled is problematic because the 1999 Standards are important references for those making tests that are accessible to students who are print disabled, as well as those impacted by these tests. For instance, the 1999 Standards were referred to in several works concerning test accessibility for blind students, specifically: *Test Access: Making Tests Accessible for Students with Visual Impairments: A Guide for Test Publishers, Test Developers, and State Assessment Personnel*, Second Edition, by Carol B. Allman, Ph.D., published by the American Printing House for the Blind (**Exhibit C**), and an online resource published by the American Foundation of the Blind, *Building Assessment Initiatives for Schools: Guidelines to Support the Contract Development Process Between Test Publishers and States* (**Exhibit D**). As an expert in the field, this means that the 1999 Standards are important references today for those making tests accessible to students with disabilities such as blindness. This also means that it is an important resource to any students or other individuals with print disabilities that want to assess compliance with the 1999 Standards. The unavailability of the 1999 Standards means that some of those who are most impacted, people who are blind or print disabled, are unable to independently access the 1999 Standards.

Testing the Public.Resource.Org Website's Accessibility

Because the 1999 Standards are no longer hosted on the Public.Resource.Org website during the course of this litigation, I was not able to locate the full text of the 1999 Standards on the Public.Resource.Org website while performing my Google search referenced above. However, searching the terms “1999 Standards for Educational and Psychological Testing” on Google (for me) shows the page where the 1999 Standards had been located on the Public.Resource.Org website, located in the first page of links in the search results. However, the file I found there was a placeholder noting the voluntary takedown of the file. I have also searched for other standards that Public.Resource.Org has posted on its website, such as NFPA 101-2000, and I have found that it would be relatively easy for a person who is blind or print disabled to use screen reader software and perform a Google search to locate a standard if it was available on Public.Resource.Org’s website. Therefore, when the 1999 Standards had been hosted on the Public.Resource.Org website, a person who is blind would have been able to locate the 1999 Standards through a simple Google search, with the assistance of screen reader software.

The Public.Resource.Org website has no required sign-up procedure. It is possible to go directly to a specific standard either by using a direct weblink or by navigating the text-oriented website. This is important because sign-up procedures can often have the effect of preventing people who are blind or print disabled from accessing certain parts of websites due to the fact that many sign-up procedures use unlabeled buttons or other elements that screen reader software cannot read. Therefore, a person who is blind or print disabled would have been able to locate a version of the 1999 Standards on the Public.Resource.Org website when it was still hosted there,

and that person would then have been able to gain access to that electronic version of the 1999 Standards.

Making the 1999 Standards Accessible Today

Because an accessible version of the 1999 Standards is not currently available, if a blind person needed to have an accessible version of the 1999 Standards, they would need to create it themselves or request that their employer, educational institution, or a specialized library for the blind create it. Generally, most blind people themselves do not have the ability to convert books. Some blind people have their own home scanners, and if they purchased a used copy online, would be able to scan the 1999 Standards page by page on a home scanner, which would take at least two hours of labor, and then perform optical character recognition on the title. Optical character recognition is the process by which a computer converts images of printed text into machine-encoded text that can be read aloud by a screen reader. If the scanning quality wasn't very good, significant numbers of errors would be introduced through the optical character recognition process. The resulting word processor file of recognized text could then be read using a screen reader.

If Bookshare were to make the 1999 Standards accessible to a blind person, we would purchase a used copy of the printed version, chop off the bindings and then process it through a high speed scanner to obtain a high quality scan of the book in less than fifteen minutes. We would then perform optical character recognition on the image scans of all of the pages of the book, which typically creates a Microsoft Word file version of the text, and then send it to an outside service (or a volunteer) to have it proofread, correcting errors introduced by the limitations of optical character recognition. Public.Resource.Org has already performed the

great majority of the most expensive and time consuming steps needed to create an accessible version of this document, specifically purchasing a print version of the title, waiting a few days to receive it, chopping off the binding and scanning it with a high speed production scanner, or utilizing a library-grade nondestructive book scanner. This is a valuable contribution to anyone, individual or organization, that wanted to ensure that the 1999 Standards are accessible to people who are blind or print disabled, if that file were still available.

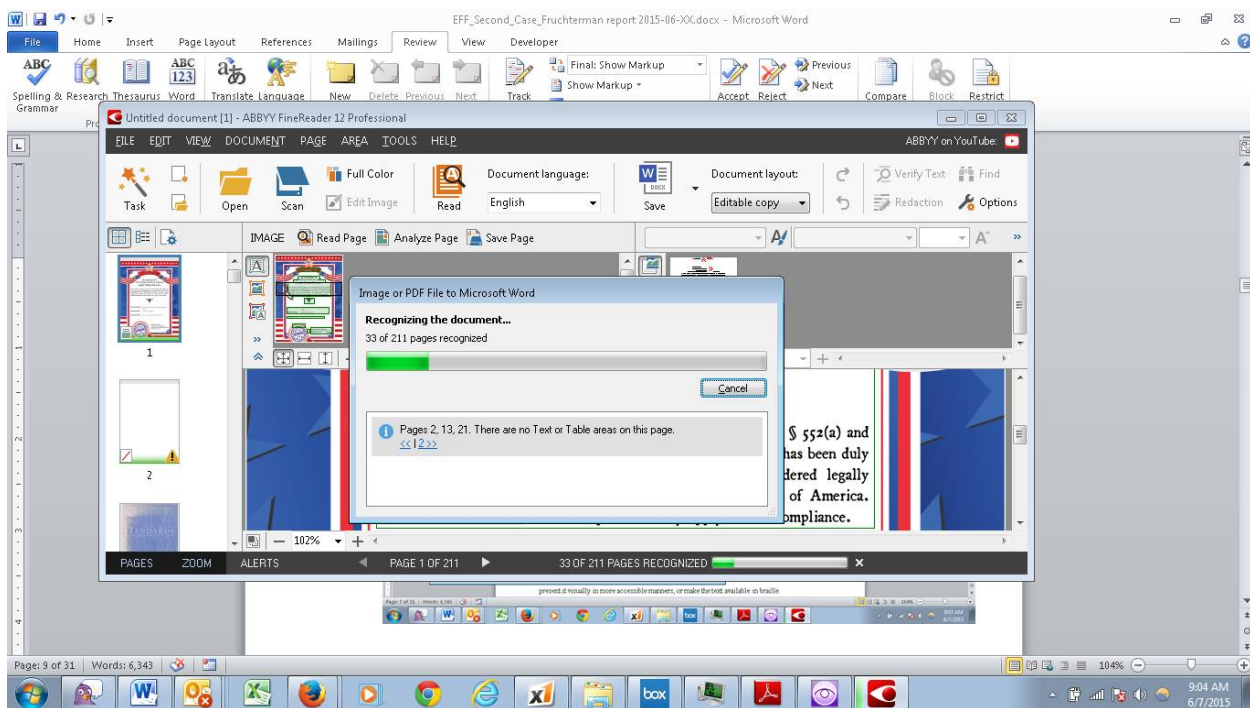
The Public.Resource.Org Version of the 1999 Standards

I was supplied with a version of the 1999 Standard in PDF format. It was represented to me that this file had been available online at the Public.Resource.Org website. I examined the file, and found it to be a high quality image scan of the 1999 Standards. If the file was still online, this would have meant that a blind person wanting to have an accessible version of the 1999 Standards would be able to do so by performing optical character recognition on the Public.Resource.Org image file, creating an accessible text version of the 1999 Standards in minutes.

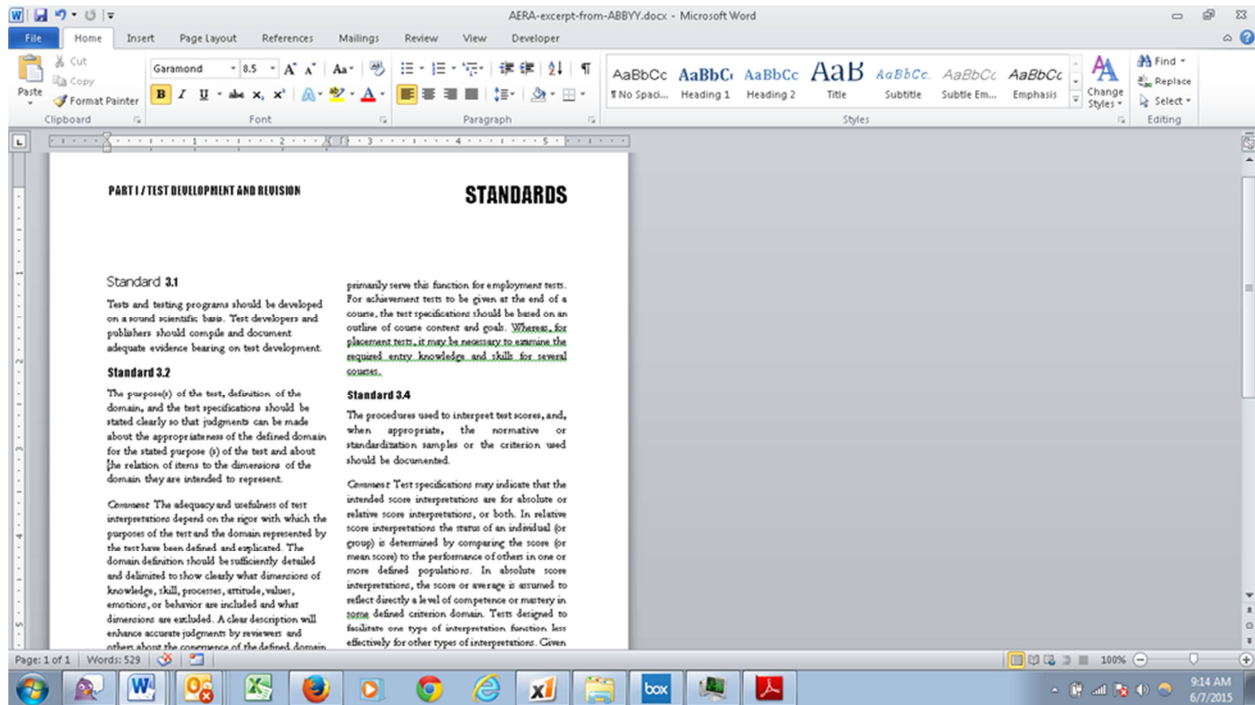
Confirming Accessibility for People Who Are Blind

I then performed the steps of taking the Public.Resource.Org version of the 1999 Standards and making it accessible, while using Window-Eyes screen reading software to read the words on the computer screen aloud. For the version of the 1999 Standards that was on the Public.Resource.Org website, I used ABBYY FineReader optical character recognition software to recognize page images, and it converted those pages into a Microsoft Word document. In addition, the process of using the ABBYY software and reading the document was something a

blind person could do independently using Window-Eyes software to perform the tasks in an accessible way, because the program speaks the menus and converted text aloud. Because the image scan by Public.Resource.Org was high quality, there were few optical character recognition errors. In addition, I also tested a typical page image from the Public.Resource.Org version using the website Free Online OCR (<http://www.onlineocr.net/>), and confirmed that it also recognized the text well. In my opinion, most of the OCR solutions that would be available to people who are blind should be able to convert this image PDF document into accessible text.



I then examined in Microsoft Word several pages of the standard as processed by ABBYY FineReader, and confirmed that Window-Eyes could read the text aloud in logical reading order. I also successfully performed full text searches on a key word, a standards number, and a page number, using Window-Eyes.



My tests therefore indicated that a blind person using a screen reader would be able to perform all of the functional tasks: reading the entire standard, navigating to a specific place in the standard, or searching on key terms. Because the text is provided in a standard format, such as Microsoft Word, a blind person is able to listen to the text, or access it using a digital braille device. This kind of text content is also highly accessible to people with other print disabilities and the assistive technology they use to access print. For example, people with low vision or with dyslexia often use a screen reader to read text aloud.

The Archive.org Version of the 1999 Standards

I was also supplied with a version of the 1999 Standard in TXT (text) format, by a staff person at the Internet Archive, operator of the Archive.org website. It was represented to me by this person that this file, aera.standards.1999_djvu.txt, had been available online at the Archive.org website. According to the Internet Archive's "Derivatives" page located at

<https://archive.org/help/derivatives.php>, when a PDF file is uploaded to the Internet Archive website, the website automatically creates derivative file types that are also accessible on that website, including TXT format. The deposition testimony of Christopher Butler from the Internet Archive, as well as the deposition testimony of Carl Malamud from Public.Resource.Org indicate that when Public Resource uploaded the PDF file of the 1999 Standards to the Internet Archive website, the Internet Archive automatically created this text file of the 1999 Standards, which was publicly accessible on the Internet Archive website.¹ I examined the file, and found it to be a text version of the 1999 Standards, preceded by informational material about the Internet Archive in HTML format. It appeared to me that the text version had been created by optical character recognition, because there were a few uncorrected errors typical of that process.

As established in my discussion of the 1999 Standards on the Public.Resource.Org website above, once the 1999 Standards are available in an electronic text format, a blind person using a screen reader would be able to perform all of the functional tasks: reading the entire standard, navigating to a specific place in the standard, or searching on key terms. I confirmed that this was the case with the `aera.standards.1999_djvu.txt` file. Because the text is provided in a standard and compatible format, a blind person is able to listen to the text, or access it using a digital braille device. This kind of text content is also highly accessible to people with other print disabilities and the assistive technology they use to access print.

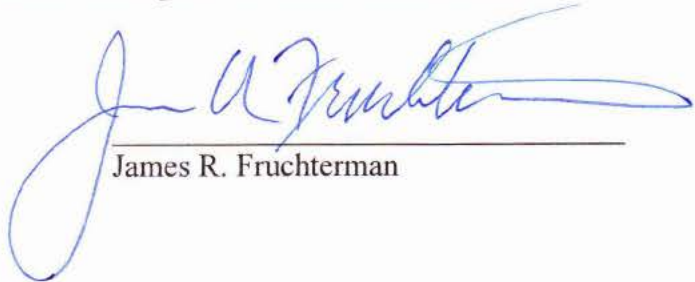
Conclusion

I was asked to review the accessibility of the 1999 edition of The Standards for Educational and Psychological Testing. I was unable to find an accessible version of the

¹ Deposition of Christopher Butler of the Internet Archive, December 2, 2014, at pp. 48-49, 87, 102-105; deposition of Carl Malamud of Public.Resource.Org, May 12, 2015, at pp. 281-284.

document online. If the document provided to me by Public.Resource.Org had been online on their website, I believe a blind person of ordinary technical skill would have been able to independently use that document and commonly available optical character recognition technology to create an accessible version of the 1999 Standards, and carry out reading and reference tasks similar to those a person without a disability would be able to do with a print version of the standard. If the document provided to me by Archive.org had been online on their website, I believe a blind person of ordinary technical skill would have been able to independently use that document directly to carry out reading and reference tasks similar to those a person without a disability would be able to do with a print version of the standard.

Dated: June 13, 2015



James R. Fruchterman

Exhibit A

James R. Fruchterman

Founder and CEO

Benetech

Education

- California Institute of Technology
B.S. Engineering, 1976-80
M.S. Applied Physics, 1978-80
- Stanford University, 1980-81
Ph.D. Studies in Electrical Engineering

Professional Experience

- CEO and Founder, 2015-present
President, CEO, Chairman, Founder, 2000-2014
Benetech (name changed from Arkenstone in 2000)
Palo Alto, California
- President, CEO, Chairman, Founder, 1989-2000
Arkenstone, Inc.
Moffett Field, California
- Director, 1989-present
Vice President Finance, CFO, 1989-2004
President & CEO, Founder, 1989-95
RAF Technology, Inc.
Palo Alto, California and Redmond, Washington
- Vice President, Marketing, 1987-89
Founder, Vice President, Finance, 1982-88
Calera Recognition Systems, Inc.
Santa Clara, California
- Prior engineering positions with:
 - Phoenix Engineering, Inc.
 - G.C.H., Inc.
 - IBM T.J. Watson Research Center
 - General Motors Company
 - NASA — Jet Propulsion Laboratory
 - Fermi National Accelerator Laboratory

Publications

- Technology Serving Humanity (chapter). In Schultz, R. (editor) [*Creating Good Work*](#), Palgrave Macmillan, February 2013
- [Guest Editor's Page](#), AFB Journal of Visual Impairment & Blindness, October-November 2012
- An Interview With Technology Guru George Kerscher, AFB Journal of Visual Impairment & Blindness, October-November 2012
- [For Love or Lucre](#), Stanford Social Innovation Review, Spring 2011
- [Developing Information Technology to Meet Social Needs](#). In *Innovations*, MIT Press, 2008
- Accessing Books and Documents, a chapter in the book, [Assistive Technology for Vision-Impaired and Blind People](#), Springer Verlag 2008
- [Everyone Deserves Access to Technology](#), OpEd in *The Sacramento Bee* by Jim Fruchterman and Gregg Vanderheiden, June 17, 2007
- Document Recognition Serving People With Disabilities, *Proc. SPIE 6500*, International Society for Optics and Photonics, 2007
- [Pattern Recognition Technology Helps Disabled People Access Books](#), *SPIE Newsroom*, International Society for Optics and Photonics, May 14, 2007
- [Nothing Ventured Nothing Gained, Addressing the Critical Gaps in Risk-Taking Capital for Social Enterprise](#), by Jed Emerson, Tim Freundlich and Jim Fruchterman, published by Oxford Said Business School, 2006
- [Build Great Companies, Then Help Build a Great World](#), OpEd in *The San Jose Mercury News*, November 13, 2006
- [Comments on Accessibility of Google Print and Google's Library Project](#), white paper, February 2005
- [Technology Benefiting Humanity](#), published in the Association for Computing Machines *Ubiquity* magazine, March 2004
- The Power of Technology Social Enterprises, published in the N-TEN forecast series, February 2004
- [In the Palm of Your Hand: A Vision of the Future of Technology for People with Visual Impairments](#), published in the American Foundation for the Blind's [Journal of Vision Impairment and Blindness](#), October 2003
- [The Chafee Amendment: Improving Access to Information](#), published in [Information Technology and Disabilities](#), a journal published by [Equal Access to Software and Information \(EASI\)](#), co-authored with Bookshare Senior Product Manager Alison Lingane, October 2003
- [The Soundproof Book: Exploration of Rights Conflict and Access to Commercial EBooks for People with Disabilities](#), published in [First Monday](#), co-authored with George Kerscher, the International Project Manager of [the DAISY Consortium](#), May 2002
- [Bookshare, Books without Barriers](#), at the [Closing the Gap](#) conference, Minneapolis, MN, October 2001

- Two presentations given at the IT Accessibility 2001 Conference, May 2001 at the National Institute of Standards and Technology
 - [I Dream of Software](#)
 - [The Business Case for Adaptive Technology](#)
- Humanizing the Voice of the Machine, with Prof. Mari Ostendorf (University of Washington), Annual Meeting of the American Association for the Advancement of the Machine, Boston, MA, February 2000
- [The Many Facets of Open Book: Ruby Edition](#), California State University, Northridge (CSUN), 15th Technology and Persons with Disabilities Conference, March 2000
- [Corporate Responsibility for Adaptive Technology](#), California State University, Northridge (CSUN), 14th Technology and Persons with Disabilities Conference, March 1999
- [Developing Partnerships for Assistive and Universally Designed Technology for Persons with Disabilities](#), Testimony before United States House of Representatives, Committee on Science, Subcommittee on Technology, August 4, 1998
- Access to Maps and Location Information through Virtual Reality Techniques and GPS Satellite Receivers, 3rd International Technical Aids Seminar, Tokyo, Japan, July 1994

Invited Talks

- [“Innovation in America: The Role of Technology,”](#) August 1, 2013, Testimony before U.S. House of Representatives, Judiciary Committee’s Subcommittee on Courts, Intellectual Property, and the Internet.
- [“Social Change at Scale – That’s Innovation!”](#) May 2012, TEDxSanJoseCA 2012, San Jose, CA.
- [“The Power of Failure, People and Karma Banking,”](#) May 20, 2012, Commencement speech, St. Mary's College, Moraga, CA.
- *“Raising the Floor,”* October, 2011, *Keynote Speech*, Association for Education and Rehabilitation of the Blind and Visually Impaired Conference, Cleveland OH.
- *Keynote speech, IEEE Sections Congress, August 2011, San Francisco, CA.*
- [“Making the Book Truly Accessible,”](#) Tools of Change Conference, New York, NY, 2011 Keynote Speech
- UBS-Ashoka Visionaris Award, Keynote Speech, Social Entrepreneur of the Year Award, Mexico City, Mexico, September, 2010
- A series of three invited speeches on Bookshare and accessible books, in Tokyo, Shizuoka and Osaka, Japan, February, 2009
- Keynote Speech, Social Enterprise World Forum, Edinburgh, Scotland, September, 2008
- *“Raising the Floor: Providing Accessible Technology and Content to Every Person with a Disability on the Planet,”* International Conference on Computers Helping People with Special Needs, Linz, Austria, July, 2008 Keynote Speech
- *“Raising the Floor,”* CSUN Conference on Technology and Persons with Disabilities, March, 2008 Keynote Speech

- Extensive speaking engagements to students about technology serving people with disabilities. Have done invited talks at:
 - Stanford University
 - University of California at Berkeley
 - Brigham Young University
 - University of the Pacific
 - Santa Clara University
 - California Institute of Technology
 - San Jose State
 - University of California at Santa Cruz
 - University of California at Davis
 - Loyola Marymount University
 - Pepperdine University
 - University of Washington
 - Columbia University
 - Harvard University
 - University of Geneva
 - Oxford University
- Inflection Point Opportunities in Social Investment, Closing Keynote for the UBS Philanthropy Forum, Lisbon, Portugal, July 2007
- It's Not Rocket Science: Building Social Enterprises, Keynote for the 7th Gathering of the Social Enterprise Alliance, Atlanta, Georgia, March 2006
- Opening Keynote for the Global Social Venture Competition, New York, April, 2006
- Keynote for the 7th IAPR Workshop on Document Analysis Systems, Nelson, New Zealand, February 2006
- [Building a Global Library for People with Print Disabilities](#), a speech for the World Summit on the Information Society, Tunis, Tunisia, November 2005
- Innovating Information Technologies to Protect Human Rights, a speech for the World Affairs Council of Northern California, February 2004
- Setting the 2004 Agenda: Technology, speaker at the World Economic Forum, Davos, Switzerland, January 2004
- Seizing Market Failure as an Investment Opportunity, Keynote for the Business for Social Responsibility Annual Conference, Los Angeles, November 2003.
- In the Palm of Your Hand, Keynote for the World Blind Union Asia Pacific conference, Singapore, November, 2003
- Technology and Human Rights, University of Peradeniya, Sri Lanka, November, 2003
- When Markets Fail, Who Responds? Discussion Leader at the World Economic Forum, Davos, Switzerland, January 2003
- Technology for Nonprofits, with Michael Gilbert, National Gathering for Social Entrepreneurs, Minneapolis, MN, December, 2002
- Bookshare: Large Scale, Web-Based Accessible Books, TechShare conference organized by

the Royal National Institute of the Blind, Birmingham, UK, November 2002

- Putting Technology to Work for Development, speech at the United Nations to the joint meeting of the World Technology Network and UNOPS, July 2002
- Bookshare: The Project for Creating Accessible Books through Computers, at the General Session of the [National Federation of the Blind](#) 2002 Annual Convention, July 2002
- Stanford Social Entrepreneurship Conference, January 2002
- [The Once and Future Web: Tenth Anniversary of the First U.S. Web Page](#) at the Stanford Linear Accelerator Laboratory, December 2001
- NetImpact Annual Conference at Kenan-Flagler Business School, November 2001
- American Council of the Blind Annual Convention, July 2001
- [Bringing Socially Beneficial Technology into the Service of Humanity](#), EE380 at Stanford University, April 2001
- Information Technology in the Service of Human Rights at the Computers, Freedom and Privacy Conference, March 2001
- Rank Prize Fund Symposium, Grasmere, England
- Guest Lecturer for CSUN program in disability leadership

Professional Associations

- Association for Computing Machinery
- Institute of Electrical and Electronics Engineers
- American Association for the Advancement of Science
- Social Enterprise Alliance

Awards and Public Service

- Head of Benetech Delegation, Diplomatic Conference to Conclude a Treaty to Facilitate Access to Published Works by Visually Impaired Persons and Persons with Print Disabilities, World Intellectual Property Organization, Marrakesh, Morocco (2013)
- Member, Global Agenda Council on Measuring Sustainability, World Economic Forum (2012-2014)
- Member of the Board of Directors, ZeroDivide, foundation investing in community enterprises that leverage technology to benefit people in low-income and other underserved communities (2007-2013)
- Commissioner, Federal Advisory Commission on Accessible Instructional Materials in Postsecondary Education for Students with Disabilities, 2010-2011
- Duke University, CASE Award for Enterprising Social Innovation, 2011
- Brigham Young University, Center for Economic Self-Reliance Social Innovator of the Year, 2009
- AT&T Technology Innovation Award from the Alliance for Technology Access, March

2008

- Strache Leadership Award from the California State University, Northridge, 2007
- John D. and Catherine T. MacArthur Foundation Fellowship, 2006
- Technical Advisory Committee Member, National Instructional Materials Accessibility Standard, U.S. Department of Education (2005-2008)
- Advisory Committee Member, National Instructional Materials Accessibility Center, U.S. Department of Education (2006-present)
- [Skoll Award for Social Entrepreneurship](#), 2004 and 2006
- Fast Company Social Capitalist Award: Top 20 Groups Changing the World, 2004
- Laureate, [The 2003 and 2001 Tech Museum Awards](#)
- [American Library Association Francis Joseph Campbell Award](#), 2003
- [Schwab Foundation Outstanding Social Entrepreneur of 2003 Award](#)
- Member, the Community Partnership Committee, which oversees a diversity and disability agreement with SBC, Inc.
- Runner-up, Yale-Goldman Sachs National Nonprofit Business Plan Competition, 2003
- American Foundation for the Blind Access Award, 2003
- [Robert S. Bray Award](#), The American Council of the Blind
- Winner, Education Category, 2002 Stockholm Challenge
- [Fast 50 Champion of Innovation](#) 2002
- Judge, 2002 [National Social Venture Competition](#)
- Member, Board of Directors of the [Social Enterprise Alliance](#) (2000-2010, chair 2008-2010)
- Member of the Advisory Board, Telecommunications Access Rehabilitation Engineering Research Center, a joint effort of the Trace R&D Center of the University of Wisconsin-Madison and the Technology Access Program of Gallaudet University, 2001
- Panelist, National Science Foundation Small Business Innovation Research Program, 1998, 2000, 2003
- Participant, 1998 NSF Workshop for Discussing Research Priorities and Evaluation Strategies in Speech Synthesis, August, 1998
- Member, Electronic Information and Technology Access Advisory Committee, a federal advisory committee responsible for drafting federal acquisition standards for accessibility under Section 508, 1998-1999
- Member, Telecommunications Access Advisory Committee, a federal advisory committee responsible for making recommendations to the U.S. Access Board and Federal Communications Commission on implementing portions of the 1996 Telecommunications Act, 1996-1997
- U.S. Patent Number 5,470,223: System and Method for Tracking a Pedestrian

- Finalist, 1996 Discover Magazine Awards for Technological Innovation
- 1996 Access Award, American Foundation for the Blind

Major Works and Areas of Expertise

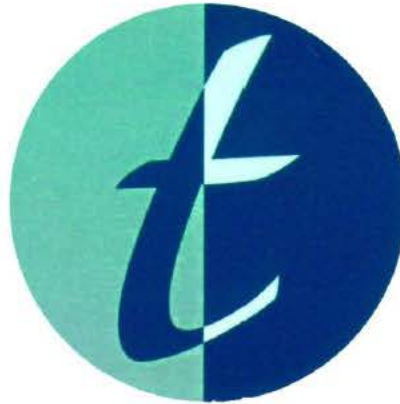
- Founder and CEO of [Benetech](#), a highly innovative nonprofit company focused on using the power of technology to address social needs in areas such as disability, literacy, human rights and the environment.
- Founder of Arkenstone, Inc., a leading nonprofit organization providing adaptive technology for education and employment for people with disabilities and the largest maker of reading systems for people with blindness, vision impairment and learning disabilities. Developer of the Arkenstone Reader, the first affordable reading system for the blind. Designer of Open Book, the first talking Windows program for the blind. Co-inventor of Atlas Speaks, the first accessible map software for the blind, and of Strider, a talking GPS locator for the blind.
- Cofounder of [RAF Technology, Inc.](#), the nation's leading company in optical character recognition technology for processing forms in postal and medical applications. RAF's software is used to route the United States mail.
- Cofounder of Calera Recognition Systems, Inc., the first company to develop omnifont optical character recognition that works without user training.

Exhibit B

Documents, Facts, or Data Considered in Forming My Opinions:

- The Public.Resource.Org website, at www.public.resource.org
- The American Printing House for the Blind website, at www.aph.org/
- The Bookshare website, at www.bookshare.org/cms
- The Learning Ally website, at www.learningally.org
- The National Library Service for the Blind and Physically Handicapped, Library of Congress website, at <http://www.loc.gov/nls/catalog/?loclr=blognls>
- *Test Access: Making Tests Accessible for Students with Visual Impairments: A Guide for Test Publishers, Test Developers, and State Assessment Personnel*, Second Edition, by Carol B. Allman, Ph.D., published by the American Printing House for the Blind, and an online resource published by the American Foundation of the Blind, available at www.aph.org/tests/access2
- *Building Assessment Initiatives for Schools: Guidelines to Support the Contract Development Process Between Test Publishers and States*, available at www.afb.org/info/afb-national-education-program/jltli-2005-education-summary/checklist-for-rfp-building/235
- Window-Eyes screen reader software
- ABBYY FineReader optical character recognition software
- The 1999 Standards in image only PDF format, as provided to me by Public.Resource.Org
- The 1999 Standards in TXT format, as provided to me by the Internet Archive
- The deposition of Christopher Butler of the Internet Archive, December 2, 2014
- The deposition of Carl Malamud of Public.Resource.Org, May 12, 2015

Exhibit C



Test Access

Making Tests Accessible for Students with Visual Impairments:

*A Guide for Test Publishers,
Test Developers, and
State Assessment Personnel**



TEST ACCESS:

Making Tests Accessible for Students With Visual Impairments

**A Guide for Test Publishers,
Test Developers, and State
Assessment Personnel***

Fourth Edition

Carol B. Allman, Ph.D.

Published by
American Printing House for the Blind
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July 2009



AMERICAN PRINTING HOUSE
FOR THE BLIND, INC.

***Book Number two in the TEST ACCESS Series, promoting accessibility of testing materials for persons who are blind or visually impaired**

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Work in Progress: This document represents a set of guidelines for making tests accessible to students with visual impairments. These guidelines are a "work in progress" and will be routinely updated and revised as additional information is collected and research results are learned. Please address questions, concerns, and suggestions regarding these guidelines to the director of APH's Accessible Tests Department at 1-800-223-1839 or e-mail them to tests@aph.org.

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INTRODUCTION

Purpose of Document

The American Printing House for the Blind (APH) is committed to ensuring that educational materials are accessible to students with visual impairments. Students with visual impairments include those with some usable vision, as well as students with no usable vision. This document is provided as a guide for making tests accessible in tactile, large print, and audio formats. It is anticipated that this guide will be used as a tool for implementing appropriate guidelines as test publishers, test developers, test editors, and state assessment personnel are developing and adapting tests and assessments. Prior planning using the contents of this document will help ensure that tests are accessible and will reduce the need to retrofit a test. Questions concerning this document, the specific guidelines, or resources discussed can be addressed to APH's Accessible Tests Department at 1-800-223-1839 or tests@aph.org.

Federal and State Mandates

Federal and many state laws require that all students be assessed through state assessment procedures using the appropriate accommodations. In the school year 2005-2006, states were required to assess all students' progress annually in mathematics and reading in grades 3-8 and once in grades 9-12. In addition, by 2007-2008, states were required to assess all students' progress in science, at least once in grades 3-5, 6-9, and 10-12. Assessment results of all students must be reported publicly, and these results are to be incorporated into the state's accountability plan.

Satisfying these federal requirements necessitates careful attention to making tests accessible for all students. Students with visual impairments have some unique communication needs that must be addressed as tests and assessments are made accessible for them. Converting test items into braille, tactile graphics, large print, or audio format fails to guarantee that the items are accessible. For example, test items that instruct the student to "draw the results of the following" or "write a story based on the picture" are not truly accessible to braille readers. Other examples of this misconception are discussed within each media-specific section of this document. Careful planning during test development can help ensure that tests are accessible, while maintaining the rigor intended.

Expectations for Students with Visual Impairments

If students with visual impairments are to participate effectively in state and national testing programs, they must have opportunities to learn academic skills that will be assessed. These opportunities often are overshadowed by special skills training to such students, who may miss all or part of academic classes in order to obtain the skills essential for using braille, assistive technology, and/or independent living skills, including orientation and mobility.

In addition to providing the training of special skills, school personnel must be aware of each student's need for instruction in all academic areas. This may entail extended days or school years or supplemental instruction by other agencies that serve students with visual impairments.

Students with visual impairments must spend their educational time working toward academic content standards, learning special skills needed for independent living, exploring appropriate media for access to printed material, and evaluating ways of communication that are effective for them. Access to printed material may include braille, tactile graphics, regular print with magnification devices, large print, the use of a human reader, auditory access, or technology access that provides braille, print, or auditory information. No single method will work for every student, in all situations. Educational personnel must ensure that students are exposed to and have opportunities to try all options of access. A student's communication mode must be based on what works for him or her. See Appendix A for a discussion of braille versus auditory access.

School personnel must maintain high expectations for the education of students with visual impairments. If opportunities to learn are present in the curricula, students will have the experiences needed to learn difficult skills such as map and graph reading, production of graphs and charts, reading technical materials, or computation of advanced mathematics. Students cannot be denied their right to learn difficult skills just because they have a visual impairment. It is these more difficult skills that are being assessed routinely on most state and national assessments of student progress in reading, mathematics, and science.

Universal Design

In the construction and administration of tests, the process of universal design helps to ensure accessibility for a multitude of students. Universal design provides the widest range of students the ability to demonstrate adequately their skills and knowledge. This process should retain the validity of inferences drawn from the test results.

The concepts of universal design apply to instruction as well as assessment. During instruction, universal design enables investigating appropriate methods, practicing skills and knowledge using appropriate methods, experiencing trial and error to determine the best methods, and discovering the success of knowledge and skills learned using the best methods for each individual student. During assessment, universal design becomes the process of ensuring that the majority of students can demonstrate their knowledge and skills. Both aspects of learning, instruction and assessment, are driven by the standards of each individual state.

To ensure that an assessment system is fair and accessible to all students, states are required to document how they include the principles of universal design in the item review process. Generally the principles of universal design include (Thompson & Thurlow, 2002, Thompson, Johnstone, & Thurlow, 2002):

- Attention to an inclusive assessment population,
- Constructs, including content and cognitive complexity, that are precisely defined either through states' standards or the test item specifications,
- Accessible test items, as determined by item writers and review teams that include personnel familiar with various media (braille, tactile graphics, large print, regular print, and audio),
- Non-biased test items, as determined by item writers and review teams,
- Test formats, response options, and scoring policies that are amenable to various approved accommodations needed by students,
- Simple, clear, and intuitive instructions and procedures,
- Comprehensive and relevant language that provide needed distracters in test item foils but are not designed to confuse the student, and
- Maximum legibility of print formats including formats that are free from clutter and void of grayscale.

Suggestions for applying universal design to item development include:

- Ensuring that test item writers are trained in concepts of universal design,
- Providing test item writers and reviewers with construct and construct-related information during the construction and review of test items,
- Examining each test item for universal design principles (linguistic complexity; cognitive complexity; formatting; bias issues; modalities of braille, large print, and audio; and response formats to be allowed),
- Recommending allowable accommodations for test administration,
- Re-examining all test items for fidelity to the construct, and
- Field testing all test items with intended populations.

The principles of universally designed assessments are the basis for many of the guidelines provided in this document. Additionally, the references listed at the end of this document have been written by individuals involved in ensuring the accessibility of materials for students with visual impairments. This document describes guidelines that support braille, tactile graphics, large print, and audio production of test items.

GENERAL GUIDELINES FOR ACCESSIBLE TEST FORMATS

Students with visual impairments may require testing materials in regular print, large print, braille, tactile graphics, audio formats, or some combination of these formats. The provision of a test and related materials in braille, large print, or audio provided an individual student should be based on the medium used by the student, as identified in the Individualized Education Program (IEP) document. Alternate format tests should be used only by students who use that medium to access printed textbooks and other instructional materials.

Students with visual impairments can be, and must be, made part of the state's assessment program through use of accommodations that allow them to demonstrate their knowledge and skill acquisition, as outlined in each state's standards and assessment system specifications. Regardless of the media chosen, students may need access to special materials such as braille paper, bold line writing paper, talking calculators, abacuses, raised or bold line rulers, braillewriters, slates and styluses, word processors, or other materials and devices. A more thorough discussion of accommodations is provided in the section on Accommodations in Testing Students with Visual Impairments and in Appendix F.

The following general guidelines are recommended for all formats that are developed for accommodating students with visual impairments. Various aspects of test construction and implementation are addressed in this section.

Contract Development

1. Contracts between states and test publishers/producers must include provisions for state approved alternate media (braille, large print, audio editions of tests, and scripts for oral presentation of tests) including answer sheets and practice tests.
2. Test publishers need to have the capability of providing the test administration manual in braille, large print, or audio for test administrators who are visually impaired and need accessible media. The contract should state if test administration manuals are needed in accessible media.
3. Contracts must include timelines for development, proofreading, revising, and production of braille, tactile graphics, large print, and audio test formats and accompanying practice materials.

4. Contracts regarding accessible media should guarantee that each medium of test materials and practice materials is produced by the same entity to ensure consistency in format and graphic production techniques. Every effort should be made to ensure consistency of presentation from one year to the next, and from one level of the test to the next.
5. Contracts may need to include specifications on tools and materials that need to be developed or provided to test takers using alternate media, e.g. a braille ruler, a tactile or large print protractor, or periodic table of the elements, real money for money related test items, or some actual objects such as a ball or cube.
6. Contracts may need to include plans to ship special versions of tests separately from regular print versions so that distribution of the accessible formats occurs in a timely manner.

Test Development

1. Test development must ensure that test score inferences reflect intended constructs and not disability characteristics (AERA, 2000).
2. The construct to be measured must be specified in documents and made available to test item writers and reviewers and to accessible media producers.
3. Availability of item specifications is essential in determining appropriate accommodation use and in the reproduction of test items to be presented in braille, tactile, large print, or audio formats.
4. Test publishers must maintain access to experts in the media of braille, tactile graphics, large print, and audio, who can provide information concerning test development and transcription and tactile graphic design, and who are able to proofread test materials before mass duplication, and otherwise ensure that materials are provided in a timely and accurate manner. Proofreading the braille, large print, or audio version of the test before multiple copies are made confirms that the material is readable and that the adapted test follows the print copy in numbering and lettering of test items and answer choices, and that the graphics are readable and located correctly. The proofreader must also check for proper formatting.
5. Validity issues concerning all accessible formats and accommodation needs should be discussed during test development (Phillips, 1994). The provision of a test in accessible media should be considered a valid accommodation as long as it retains the construct that the test was designed to measure. If a performance item requires drawing, consider allowing an explanation or description as a valid response

option. If such a revision is allowed, scoring criteria must include information on this option.

6. All directions on a test should be worded to allow for alternate response methods. For example, use of directions like "circle the answer" should be replaced with "indicate or mark the answer."
7. Specific guidelines on any test format changes, allowable accommodations (including time allowances), and general assistance that can be provided to the student must be stated in the test administration manual or supplemental administration materials.
8. Test item development and review committees should be made aware of alternate media issues regarding the use of either complicated or nonessential pictures and graphics.

Item Development and Review

1. Educators with specialization in the field of visual impairments must be included in the test item development process.
2. All test items must be reviewed by persons familiar with visual disability issues to ensure that no test item is biased or discriminatory toward persons with visual impairments.
3. It is recommended that as much information as possible be included in the text of a test item. This will help prevent the introduction of pictures that contain information necessary for selection of the correct answer, but which cannot be adequately brailled, presented in large print or tactile graphics, or described in audio format.
4. In general, use of "vision specific" language can be maintained, e.g., "Look at the following list of animals."
5. The test item pool must be large enough for bias and item review committees to replace items determined to be biased or inaccessible in braille, large print or audio formats, or tactile graphics.
6. A representative sample of students with visual impairments must be included in any field-testing of the assessment, as prescribed in Standard 10.3 (p. 106) of the *Standards for Educational and Psychological Testing* (1999).
7. All practice materials must be provided in accessible format at the same time that print practice materials are provided. Allow sufficient time for accessible format preparation.
8. Provisions should be made to conduct item analyses for accessible format test items.

Accessible Test Development

1. To ensure that quality materials are developed, state assessment programs should contract with an agency or persons experienced in producing braille, tactile graphics, large print, and audio formats. If a multimedia presentation is to be used by test takers, it is important that the accessible media producer(s) coordinate presentation of the test items between each of the media.
2. Production of the alternate format test includes the editing, transcription, reformatting, design, and proofreading of the alternate media.
3. Holding a conference call with all parties involved before the accessible media producer begins to review/ edit the test items helps to maximize a successful experience and end product.
4. The name and phone number of the customer's primary contact person needs to be provided to the producer of accessible media to facilitate timely production.
5. Accessible format producers will need access to a primary contact person, as well as item specifications that include information about the skill and construct being assessed.
6. Test items should be deleted or substituted only if the item cannot be provided in braille, tactile graphics, large print, or audio format without significantly changing the item and the intent of the question. Although not recommended, some test items may need to be omitted if they are not adaptable as determined and advised by item reviewers with expertise in the format under consideration. The deletion or substitution of items should happen infrequently, particularly if educators with specialization in visual impairments have been involved in the item development process. Attention to universal design during test development will also reduce the probability that a test item will have to be deleted.
7. If items are omitted in alternate versions, the test score must be rescaled so that braille, large print, and audio format users are not unfairly penalized and so that scores can be obtained for diagnostic and accountability use. The original numbering system should be maintained and the word "omitted" inserted in place of any item that had to be omitted.
8. Responses from the primary contact person regarding questions and requests for substitutions require a quick turn-around time in order to ensure accuracy and timeliness of delivery of accessible media.
9. Substituted items should assess the same skill and have equal value and validity. Substituted items must maintain the correct answer in the same position as that of the original test item.

10. All field test items and sample questions must be included in accessible format test versions.
11. Test contracts must indicate preferred publication strategies, such as braille on both sides of the braille paper (referred to as interpoint braille), preferred methods of producing tactile graphics, and binding of the braille test materials. Assistance with determining these specifications is available from APH.
12. Braille tests are generally produced using contracted braille, the typical method for producing braille in which short forms of words are used. If the test is for a young child, a new braille reader, or someone struggling to learn braille, a test may be needed in uncontracted braille, whereby every letter of every word is represented by an individual braille cell.
13. The format of an accessible media test edition must follow the print format as much as possible. That is, ideally the number of test items and test sections should match that of the print format, as should the order of the test items and test sections. Deviations from the print version of the test must be outlined in a print copy of Test Administration Notes for the altered format. Test Administration Notes must include reference to print versions with associated accessible format page numbers, identify passages and items by page (print and alternate format), and provide indication of any changes made to the alternate format. Appendices B and C contain templates for creating Test Administration Notes for braille and large print formats.
14. Special requirements, such as an independent proofreading of test materials, exact print reproductions of the braille/tactile test items, or any print labels to be included on braille or tactile graphics need to be considered and included in the contract.
15. APH's policy in accessible test production includes close collaboration with, and approval from, test publishers and content specialists to ensure that edited items are acceptable as edited.
16. Test security and confidentiality standards must be upheld during the process of developing accessible formats.

Test Administration

1. Computers and adaptive technology, electronic note takers, cassette player/recorders, the cassettes, CDs, etc., must be inspected for proper functioning prior to their use during a test. The test administrator or proctor should be instructed on how to proceed if equipment fails or malfunctions during administration of the test.

2. Each test administrator or proctor of a student using an alternate medium test or a combination of media should be assigned a testing packet that includes a list of materials needed (approved technology or other manipulatives, such as a talking calculator, braille or large print ruler, braille paper, bold line writing paper, raised line graph paper, etc.)
3. The test administrator or proctor must ensure that special tools and materials noted on the student's IEP and used for instructional purposes as accommodations are available, as needed, to students in the test-taking environment. For example, if a visually impaired student routinely uses an abacus in the classroom when sighted students are allowed to use a pencil and paper for computational purposes, then an abacus must be available during a test. See Appendix D for further explanation on the use of an abacus in test-taking situations. Specialized tools and materials should not be provided if their use presents an unfair advantage.
4. In preparation for test administration, the test administrator needs to review the original test(s), the alternate format/s of the test/s, the original test administration manual(s), the test administration manual/s for accessible media, and the test administration notes for the special format/s. These materials should be provided to the test administrator under secure and confidential means two full days prior to test administration. This time is needed so the test administrator can plan appropriately for administration of the test(s) in alternate media.
5. Prior to testing, the test administrator or teacher must ensure that the test is available in a student's primary or preferred reading medium or combination of media, and that the student has sufficient proficiency in use of this medium and related tools such as computers, assistive devices, CD players, or braillewriters.
6. If students are expected to bring select tools and materials to the test environment, they need to be notified of this ahead of time.

BRaille AND TACTILE GRAPHICS

The information in this section describes methods for developing and implementing assessments for students with visual impairments who require braille text or tactile graphics. While some technology provides auditory access to print, braille is critical to literacy and must be an option for those students who routinely use it. See Appendix A for a discussion of braille versus auditory access.

Generally, learning to read braille is no more difficult than learning to read print. The tactile process is different from the visual process and creates the following considerations:

- Braille (tactile reading) consumes more time than does visual reading, as students who read braille typically read at fewer words per minute than do students who read print (Trent & Truan, 1997), and
- Braille reading requires tactile training in page orientation and reading and interpretation of tactile graphics.

Designing Tactile Graphics

The following are aspects of test items that need special consideration when reviewing and designing for production as tactile graphics:

- Complicated graphics that contain multiple layers or pages of information
- Three-dimensional objects from a particular visual perspective, e.g., a top view of a house or pyramid
- Rotation items that use letters of the alphabet (print letters rotated or flipped)
- Science items that use pictures to demonstrate experiments and other scientific concepts or processes (cell, digestive or muscle systems, etc.)
- Map reading items that depend on visually recognizable and unlabeled continents, countries, or states, e.g., Africa, Italy, or Florida
- Visual recognition items (interpreting a picture without supporting text)
- Items that require interpretation of complicated drawings, e.g., cross-sections of diagrams
- Optical illusions

These types of items frequently require extensive revision during the production process. For example, a text-based description in addition to the tactile graphic may be needed. The accessible media producer may request a test publisher to substitute such items with those that can be made more accessible and which will retain similar, if not identical, concepts and have the same weighted score.

Braille Translating (Transcription) Process

Consideration of the following points will facilitate the production of test materials in braille format for students with visual impairments:

1. Test developers and publishers must ensure that contracts for braille materials specify the use of braille transcribers who are certified by the National Library Service (NLS), experienced at transcribing tests, and knowledgeable of braille formats. Braille formats must be modeled after those of the Braille Authority of North America (BANA) Guidelines, found in *Braille Formats: Principles of Print to Braille Transcription*, 1997.
2. As a test is edited for braille transcription, necessary changes will be made to make the material accessible to braille readers. Correct braille transcription also requires that BANA specifications be observed. Simplification and/or labeling of some graphic material will likely be necessary. Simplification entails the elimination of some artistic features, removal of some superfluous material (without eliminating distracters and other text material that is necessary to maintain the validity of the test item), or movement on the braille page of some text or graphic components for more efficient readability by the braille reader (moving a scale, legend, or compass rose on a map to a different location). Even simple tactile graphics can be very difficult to interpret; some additional labeling may be needed for the test taker to read and understand the tactile graphic. Note that simplification and labeling are done relative to the construct being tested. If during the test editing process, it is not clear what is being tested, the test publisher will be consulted for clarification.
3. Reproduced references, such as tables of content, dictionary pages or indices, may need to be shortened in the braille test version while maintaining correct answer choices and foils. This is done to contain the braille item to one page, if possible.
4. Provision of open-ended items in braille format must indicate to the braille reader the amount of space provided for the answer. Directions must specify the space provided by suggesting the time

needed to complete the item or by indicating the approximate page area or the number of lines or paragraphs. Generally, one page of print is equal to about two pages of braille unless graphics are involved which will add to the page length. Directions may indicate that there are four print lines or eight braille lines available for responding.

5. Unnecessary boxes and framing of material may be omitted unless the framing provides a separation of graphic material from text or encloses a group of scattered or randomly placed objects.
6. Specific braille codes exist for transcribing literary works, mathematics, and science materials into braille. When brailleing the content of the print version of the test, braille transcribers must follow the standards of code for braille transcription. These codes are provided in *English Braille American Edition*, 1994; *The Nemeth Braille Code for Mathematics and Science Notation*, 1972 Revision; and *Braille Formats: Principles of Print to Braille Transcription*, 1997. All three manuals are available from the American Printing House for the Blind.
7. An experienced braille proofreader must be utilized for proofreading all materials and, in particular, examining all tactile graphics to ensure readability and accuracy.
8. Experienced braille readers might also need to transcribe students' braille responses into print for scoring. See the section on Guidelines for Braille and Large Print Test Response Transcription.
9. Braille versions of a test may include transcriber's notes (notes to the braille reader from the braille transcriber about the use of special symbols, and use of any special formats). Transcriber's notes must be written in print within the Test Administration Notes for Braille Edition (Appendix B). The number of transcriber's notes in tests should be kept to a minimum.
10. Test security and confidentiality standards must be upheld by braille test transcribers, tactile graphic designers, and proofreaders. This includes the following:
 - Keeping testing materials in a secure place to inhibit access by unauthorized persons,
 - Not sharing information or implying content contained in the testing materials with other persons,
 - Maintaining discretion about the work being performed,
 - Returning all materials to the contracting source, and
 - Maintaining confidentiality of test content.

Tactile Graphics

This section offers information regarding the use of tactile graphics when testing students with visual impairments. Graphic material, which includes maps, charts, graphs, diagrams, and illustrations, frequently contains information that is difficult to present in a tactile format. Research supports the use of tactile graphics and "the idea that visual experience and visual imagery are not required for the perception of simple tangible pictures . . ." (Heller, et al., 2002, p. 349). It is possible to provide many types of graphic material in braille or raised line drawings. However, certain types of graphic materials either cannot be provided in braille or tactile formats, or they are so complex that doing so produces a graphic that cannot be read and interpreted by the test taker.

Most maps, charts, graphs, and diagrams can be translated into tactile form if the test publisher will allow some editing. Editing could involve eliminating the shading used solely for visual effect, reducing the number of distracters, providing two or three charts to present the same information as one complex print chart, using text based descriptions to supplement or replace graphics, or using symbols and words with a key to provide information. Edits needed to convert print graphics to tactile graphics need to be approved by test developers or publishers.

Most print materials use graphics to emphasize a point, provide another format for information, or provide visual appeal. Because graphics are common in text, training in reading graphic material and interpreting a written description of a graphic are important skills for the student with a visual impairment to learn. Guidelines for tactile graphic materials are described on the next few pages in terms of general guidelines, design, symbols, lead lines, labels, and indicators and scale.

General Guidelines:

1. Graphics in mathematics tests must follow provisions of *The Nemeth Braille Code for Mathematics and Science Notation, 1972 Revision, BANA (1983)*.
2. Decide if a tactile graphic is needed. Omit the graphic if it is purely decorative. Consider using a text based description to either supplement or to replace all or part of a graphic.
3. Graphics should be tactually clear and contain only relevant information based on an understanding of what is being taught

and what the student's task is. Visual information that is irrelevant to the meaning or purpose should be omitted.

4. Graphic material should be simplified without omitting needed information or creating an unfair advantage by alluding to the answer.
5. Picture descriptions should be presented concisely within the student's test booklet if information in the picture is vital to answering one or more test items.
6. Picture descriptions will appear as needed in transcriber's notes in appropriate places throughout the test and must be included in the Test Administration Notes.
7. Some graphics are best handled by supplementing the image with a heading, label, description, or key. Edits must be made carefully so that the braille reader is not unintentionally given an advantage or cue to the correct response.
8. Consider splitting complex graphics into separate drawings showing layers of information, unless this adds complication for the test taker.
9. In general, use texture to add information and draw attention to select parts of a tactile graphic.
10. When necessary, to avoid confusion and accentuate important information, use different areal symbols (texture) to differentiate between bodies of water and land on maps.
11. Charts and graphs should be confined to one page when possible. If graphics and the accompanying test item require more than one page, use facing pages to present graphics and the accompanying test item if possible.
12. If a braille test taker is asked to produce a graphic as part of the test item, such a task can be achieved through the use of tactile graphic materials that are familiar to the braille reader. Another option that may be acceptable to test developers is for the student to describe or explain data or other information. This option must be approved by the test contractors and included in the scoring criteria. The test administrator and the braille reader's teacher, using the braille reader's current IEP, must collaborate prior to the administration of the test to ensure that appropriate materials are provided. For the purpose of scoring, student-produced graphics will need to be hand-scored or transcribed into a print graphic by persons familiar with braille, braille readers, and the content area being tested. See section on Guidelines for Braille and Large Print Test Response Transcription.

13. An experienced braille reader must proofread all tactile graphics prior to mass production of the braille test to ensure readability and accuracy.

(Kapperman, G., Heinze, T. & Sticken, J., 2000; Poppe, K. & Otto., F. 2002; Ross, D. B. & Robinson, M. C., 2000; Spence, D. & Osterhaus, S., 2000)

Design:

1. Avoid clutter and simplify.
2. "Clutter" occurs when different symbols and lines are so close or so similar that they become hard to distinguish. Spacing is the key to avoiding clutter.
3. Symbols and lines closer than ¼" may be difficult to differentiate, depending on the medium and tools being used.
4. Shapes with sides less than ½" long may not be recognizable.
5. Use different textures for lines so that test takers know which part of a line to follow when two or more line segments cross or meet.
6. "Simplify" means to eliminate unnecessary elements of the original picture. Focus on the relevant parts and omit details that are purely decorative or distracting.
7. When the print picture includes people, animals, objects, etc., replace them with simple lines, symbols, and/or labels (e.g., use the label "hand" instead of drawing a hand or use a triangle instead of a cat or dog).

Symbols (Lines, Points, and Textures):

1. Limit the lines, points, and symbols on a drawing to those that can be easily differentiated by touch. Use the most prominent symbols for the most important features in the graphic. Avoid high or "noisy" texture, which draws attention away from the key features.
2. Be consistent in using symbols within graphics of the same type within the same transcription (e.g., always use the same symbol for water on maps).
3. Use different tactile symbols for different types of information (e.g., in a map of the United States, the tactile line used to indicate state borders should differ from the tactile line used to indicate international borders).
4. Lines, points, and braille must be physically separated by at least 1/8".
 - a. This distance may need to be extended to at least ¼ inch depending on the medium and symbols used.

- b. Apply the 1/8 inch separation rule to all features that are separate, even if doing so introduces some spatial distortion.

Lead Lines:

1. Use lead lines only as needed; options for lead lines include use of keys or notes.
2. Avoid using arrows as lead lines.
3. The linear symbol used for lead lines should be different from any other lines used in the graphic and should be tactually distinctive but less prominent, such as a low relief raised line.
 - a. A lead line should begin as close as possible, without causing interference, to either the first or the last letter in the label, and it should end as close as possible to the feature being labeled.
 - b. In general, a lead line should not cross over another line. When this is unavoidable, it may make the graphic more readable by breaking the lines of the graphic to allow the lead line to "pass through."

Labels and Keys:

1. Explain and define all graphic symbols.
2. Identify all important features (e.g., capitals, bodies of water, etc.) of the graphic, even when not labeled in the print version. Place titles at the top of the page. Avoid making unlabeled graphics. Exceptions may exist in some testing situations.
3. Position labels closely to the objects to be identified to better ensure recognition. Single letters on the graphic should be preceded by either the letter sign or the capital sign.
4. Use two-letter U.S. postal codes where applicable (and other two-letter codes where postal codes are not applicable) for labeling state names on maps.
5. Words in labels need not be capitalized if their meaning will not be confused and rules of punctuation are not violated.
6. Place all abbreviations in a key and place the key above the tactile graphic.
7. Present all braille labeling within tactile graphics horizontally.

Indicator and Scale:

1. Graphics depicting measurements must maintain accurate and true proportions to match the answer choices. If answer choices must be changed, the correct response must be located in the same position as the original correct response option.

2. Position scale and other indicators as consistently as possible, preferably above the accompanying tactile graphic.
3. When it is necessary to change the scale, this fact may need to be indicated in a transcriber's note.

LARGE PRINT TEST FORMATS AND GRAPHICS

Some students with visual impairments read regular print materials and enlarge the print, as needed, by using optical devices. Some read large print materials. This section offers information regarding the development and implementation of assessments for students with visual impairments who require large print materials. Generally, two popular methods exist for enlarging tests. The regular print test can be enlarged through photocopying, or an electronic version of the test can be manipulated to reformat test items and enhance the readability of text and graphic as needed. The latter method is preferable unless issues outlined in this section have been addressed during the test development and the regular print test has been designed using universal design principles. Manipulating an electronic version of the test can best yield a large print version that incorporates the optimum reading mode for the student who uses large print.

Generally, reading skills that are difficult for a person with low vision who reads print include the following:

- Reading at a speed commensurate with regular print readers,
- Reading for extended periods of time,
- Visual scanning and skimming of text,
- Shifting gaze from a picture or graph to test item and back again,
- Shifting gaze from test booklet to answer sheet documents,
- Visually capturing an entire picture,
- Moving from one line of text to the next,
- Locating pictures and text presented in random locations on page,
- Interpreting pictures (particularly complex pictures),
- Differentiating between subtle colors and patterns used in pictures or graphs, and
- Filling in answer choices on regular print answer documents.

Consideration of these points, particularly in relation to universal design of test format and printed text, will facilitate the production of test materials in large print format. As well, most of these guidelines are applicable to regular print tests that may be used by students with low vision. Information provided on font, spacing, shading and contrast, pagination, and test booklets is a summary of work done by Elaine Kitchel, presented as "Reading, Typography, and Low Vision," a PowerPoint presentation (APH, 2002). Research completed by G. E. Legge et al.,

(Reported in "Psychophysics of Reading" 1985 through 2002 in *Vision Research*) supports the guidelines listed in the following section.

Test Format

1. Large print versions of a test and test practice materials should be reformatted from the regular print version so that adaptations can be made to font style, print size (point size), line length spacing, shading, graphics, and the number of items on a page.
2. Text should consistently begin at the top left-hand side of a page. Titles of pictures or graphs should appear at the top of the graphic.
3. Labeling should be presented horizontally rather than vertically as a general rule. Exceptions may be labeling of y-axes on graphs, etc.
4. Items that typically present the most difficulty during conversion to large print format include the following:
 - Complicated, multi-shaded drawings with extensive details,
 - Grayscale drawings that provide little contrast,
 - Colors that cannot be differentiated by persons with color blindness,
 - Large maps that cannot be contained on one page if enlarged,
 - Extensive charts with multiple columns, and
 - Charts and graphs that extend over several pages.
5. If testing materials are enlarged merely through photocopying (not recommended), the font size will vary depending on the original print font. When tests are enlarged, the font size of all text, including labels on graphs, rarely meets the 18-point size required. Enlarged materials must be reviewed and proofread before mass copying or distribution to ensure that print and background contrast are adequate, that pictures and graphs are readable and complete on the page, and that items assessing measurement are accurate and have viable answer choices.

Fonts

1. Print measuring 18 points or larger is considered large print. Point sizes between 12 and 16 points are considered enlarged print.
2. Occasionally a test in a print size larger than 18 point will be requested. In such cases, the publisher must determine if material can be adequately presented in a larger point size.
3. Decisions about the size of print and font style must be made by the test publisher and discussed with a person who has knowledge of large print use and the intended test takers.

4. Font styles that are decorative or cursive should not be used. Standard sans serif fonts with easily recognizable characters are recommended. Verdana, APHont, Arial, Antique Olive, and Helvetica are reliable choices for readability. Note: APHont, a font for people with low vision, developed by the American Printing House for the Blind (APH), embodies characteristics needed by low vision readers as identified by research. A free version of APHont is available from APH at http://www.aph.org/products/aphont_get.html.
5. Large print should have x-heights (distance from the top to bottom of a lower case "x") and t-heights (distance from the bottom of the "t" to the cross bar of the "t") of at least 1/8" with a thickness of 2 points. Eighteen point Verdana, APHont, Antique Olive and Helvetica meet this standard.
6. The use of bold print, underlined print, or quotation marks for highlighting text is preferable to using italics. Italics should only be used when absolutely necessary. Sample test items, if provided, should be presented in the same font size and style as that used for the actual test items. Letters incorporated into math problems, e.g., letters within algebraic equations, are also more readable when displayed in a non-italic, sans serif font.
7. Headings and subheadings (captions, titles of diagrams and charts) should be larger and bolder than other print and set in a font style that differs from that of the general text. Acceptable typefaces for this use include Arial Black, Helvetica Black Bold, Lucida Sans Bold, Era Bold ITC, Verdana Bold, Antique Olive Bold, and Helvetica Bold.
8. All text, including labels and captions on graphs, pictures, diagrams, maps, charts, equations, exponential numbers and letters, subscripts and superscripts, notes, and footnotes, must be presented in at least 18-point type, in order to meet the APH definition of large print (Kitchel, 2001).

Spacing

1. Leading or spacing between lines should be at least 1¼ spaces to allow persons with low vision to effectively move from line to line in the text.
2. Block style formatting and 1" margins are recommended.
3. Format should include justification of left margins, and unjustified right margins (rag right) for ease in reading and transferring from line to line. Avoid the indentation of paragraphs.
4. Avoid dividing words between lines.
5. Columns of text, excluding graphic material, should be at least 39 characters in line length. Generally, for efficient reading, columns should be avoided.

6. Test items and accompanying diagrams, pictures, and graphics should be located close to each other and on the same page if spacing permits. If this is impossible, test questions, diagrams, and answer choices should be placed on facing pages or follow closely so that page turning is reduced to a minimum.
7. Research indicates that readers with low vision and readers with normal vision read a wide-bodied font faster and with better comprehension than they read a variable-spaced font (Mansfield, & Legge, & Bane 1996).

Shading and Contrast

1. Grayscale and shading should be avoided, particularly when information needed for answering a test item is provided.
2. The highest possible contrast should be used for text and background, with attention to the use of color. Certain color combinations other than black and white may be unreadable to persons with low vision or persons with color blindness. A good rule of thumb on use of colors is to use colors that are far apart on the color wheel and avoid using colors that have similar saturation (color depth). Blue and yellow, for example, provide a high degree of contrast when used together. Red and green should be avoided because they are the most troublesome colors for persons with color blindness.
3. Large print must not be used over a background design or other graphic material.
4. Glossy paper may cause unnecessary glare. Dull finish paper in white, ivory, cream, or yellow is recommended and best complemented with black print.
5. Unnecessary boxes and framing of material should be omitted unless the framing provides a separation of graphic material from text or encloses a group of scattered items.

Cautions for Use of Recycled Paper

Whether recycled paper is appropriate or not for use by individuals with low vision depends on its color and its thickness. The color cannot tend toward gray, blue, or green. If it is slightly gray, blue, or green (and many recycled papers are) it can substantially reduce contrast. What seems like a minor contrast difference to a sighted person can be a big contrast difference to a person with low vision. However, if the tint of the paper tends toward beige, peach, pink, or yellow then it would be fine. In addition, there should be no speckles

in the paper. Best color choices for recycled paper would be cream, beige, or white. Finally, the paper should be thick enough to prevent bleed-through of inks. The paper needs to be thick enough to allow printing on both sides of the sheet with no bleed-through. The same cautions apply to materials for persons with color blindness or color vision deficiencies (Kitchel, 2009) (see section on color vision issues below).

Pagination

1. Repagination of original test materials is preferable to increasing the overall page size.
2. While double-sided pages are generally preferable, avoid double sided copying if print will "bleed" or show through or otherwise obstruct clear reading.
3. Where blank pages must appear, type the words "Blank Page" near the top left hand side of the page.

Format of Test Booklets

1. Depending on test length, large print copies may need to be separated into several booklets.
2. Generally, the test booklet should be no larger than 9" x 12", particularly for young students as well as other students with various physical conditions.
3. The binding of the large print booklet(s) should allow each page to lie completely flat for whole page viewing and ease of handling.

Large Print Graphics

The following guidelines provide information concerning the use of graphics in testing students with visual impairments who use large print formats. Work by the Large Print Atlas Focus Group (2001), who met at the American Printing House for the Blind, is included in this discussion.

The complexity of some graphic materials prohibits their being provided in large print unless they are modified to become more readable when enlarged. Most maps, charts, graphs, and diagrams can be enlarged if the test publisher agrees to some editing. Editing could involve the elimination of shading, the reduction of some distracters, the insertion of a key, or the separation of one chart into two or three.

Guidelines for large print graphics include the following:

1. Graphics in large print must exhibit good contrast, clarity, and accurate details and information.
2. No test item should rely solely on a picture for information needed to answer the test item. In consideration of universal design, include a text description of every non-text item.
3. Generally, pictures should be retained in the large print format. Editing for shaded material and clarity may be necessary. Some pictures that would need extensive editing and provide little or no cues for the large print reader may be considered for elimination. Purely decorative graphics should be deleted.
4. Overlaid print on a diagram or graph should be avoided. While visually pleasing in some instances, this technique is difficult for persons with low vision to read.
5. Multi-color graphs that use closely related colors may conceal vital information from the test taker who is unable to distinguish between the colors. Two to three contrasting colors or black and white are recommended.
6. All graphs should contain short, descriptive headings or titles.
7. Compass points, numbers, and vital information on graphs must be enlarged sufficiently for the low vision reader.
8. Map symbols must be easily distinguishable and relevant.
9. Map legends should appear near the top left hand corner of a map, if possible, and include a visually distinctive border. Use contrasting colors and distinguishable symbols rather than reproducing different sizes of the same symbol.
10. If possible, map scales, too, should be positioned near the top left-hand corner of the map.
11. Labels should be arranged within the boundaries of the country or state borders whenever possible.
12. Symbols used should be reasonable and meaningful representations, e.g., a fish for fishing.
13. Boundaries between countries should be bolder and thicker than boundaries between states or provinces on a map.
14. Pictures and graphs used in test questions requiring measurement must be true to the size intended in order to ensure that a correct answer is available.
15. Test publishers and contractors will need to address the degree of accuracy that is expected for questions involving measuring or drawing. For example, some large print readers may not be able to distinguish between 7/16" and 8/16" on a ruler. If at all possible, specially designed measurement devices, such as large print rulers and protractors, should be provided for students in both the classroom and testing situations.

16. If a graph or table does not exceed one page in the original materials, then the large print version should be edited to fit on one page, if possible. Pertinent information and distracters must be maintained.

USES OF COLOR FOR SIGNAGE, GRAPHICS, TEXT, TESTS AND POWERPOINT PRESENTATIONS TO BE VIEWED BY PERSONS WHO ARE COLOR BLIND OR COLOR VISION DEFICIENT

Introduction

Color is critical to the conveyance of meaning in signage, graphics, text, PowerPoint® presentations, tests, and other written presentations. However, some people, specifically those with color discrimination difficulties, need special consideration when color planning for educational purposes.

Virtually all color-deficient individuals have varieties of red or green deficiency. (Blue deficiency is rare indeed, with only about .001% of the population having it.) Color blindness is normally diagnosed through clinical testing by a licensed practitioner.

PROBLEMATIC AREAS

When one considers educational materials for students who are color blind or color deficient, some problematic areas come to mind:

- Use of gray-on-gray bubble sheets on test answer sheets (scannable answer documents)
- Maps with indistinguishable adjacent colors, such as coloring Spain brown and Portugal green
- Graphs with indistinguishable adjacent colors
- Use of text over graphic backgrounds, as when a poem or other text is superimposed over a photo or drawing
- Test questions which depend upon color identification for correct answers

PREPARATION OF MATERIALS FOR PERSONS WHO HAVE COLOR VISION DEFICIENCIES

Color is one of the most important aspects of visual communication and can be employed to generate interest or to communicate ideas or feelings. Yet colors for an audience with members who have color discrimination problems should be selected carefully to avoid conveyance of unintended meaning. This is especially true in educational and testing materials. Many of these materials rely on good color perception for the interpretation of graphs,

charts and illustrations. Yet even the most carefully thought-out graphic may lead the user to an incorrect answer because of poor color selection.

- **Select colors carefully.** Besides black and white, most color blind individuals can only see two colors, blue and caramel (golden brown). Red, yellow, orange, and green take on shades of caramel; purple takes on shades of blue when viewed by a person with colorblindness.
- **Less is more.** Too many colors used thoughtlessly can confuse and negate the message of a graphic. Settle on four or fewer colors and stick with them. Black and white are counted as colors when designing graphics, even though they are not usually considered colors when talking about vision.
- **Use contrasting colors.** Contrast is an important influence on the legibility of graphics, especially for persons with color discrimination problems. Substantial contrast, i.e., the use of dark values with light values, between the color of the foreground and the background should be employed. High contrast makes materials easier to read by both persons with colorblindness and those with typical vision. Light letters on a dark background or dark letters on a light background are most legible, but remember the actual colors of those combinations are important.

**CONTRASTING COLORS APPROPRIATE FOR PERSONS WITH COLOR
PERCEPTION DIFFICULTIES
(in order of best contrast value)**

- Use black and white.
- Use dark blue and white.
- Use black and bright yellow.
- Use dark blue and bright yellow.
- Use dark brown and white.
- Use pale blue and black.
- Use yellow and purple.

Notice that yellow is recommended as a common color for graphics to be used by persons with poor color discrimination. This is because yellow maintains luminance longer than any other color. Even though it is perceived as a light caramel color by persons with color blindness, it holds its brightness longer than any other hue, and therefore maintains its contrast when paired with a dark color.

COLOR COMBINATIONS TO BE AVOIDED

- Avoid gray with any color, even another value of gray.
- Avoid red with any color except white or blue.
- Avoid green with any color except white.
- Avoid brown with any color except white or blue.
- Avoid purple with any color except yellow or white.
- Avoid orange with any color except blue or white.
- Avoid two values of the same color, such as light blue and dark blue.
- Avoid a neutral color with any other neutral color.

The importance of proper attention to color selection cannot be overlooked when developing tests for individuals or groups that have color vision or color perception deficiencies.

GUIDELINES FOR AUDIO VERSIONS OF TESTS

This section is written to provide assistance in the development and implementation of accessible tests for students with visual impairments who require audio versions of a test. Audio formats include cassette tape, video, CD, computer-based, or spoken (read aloud) test versions. When an audio version of a test is administered, the audio version should be accompanied by a print, large print, or braille version of the test, or a large print or tactile graphic supplement at the very least. In this multi-media approach, a student can access illustrations or other visual material that may not be described, or only minimally described, on the audio version of the test.

Some illustrations can be described orally in an accurate manner, while other graphic material cannot be described without revealing the answer or providing an unfair advantage to the audio user. A complete script for audio versions should be written with the assistance of a content expert and provided to test administrators.

Audio versions of a test serve to standardize oral delivery of the test content and may reduce the number of school staff needed for proctoring or administering tests orally. Consideration of these points will facilitate the production and administration of test materials in audio format. (See Appendix A for a discussion regarding braille versus auditory access.)

Production of Audio Tests

1. Test publishers may only have the capability of providing one version of a test in audio format. The version selected should be parallel in content and difficulty to other versions.
2. An experienced test editor should be involved in editing for an audio presentation of a test. The audio edition will need to be coordinated with other media in which the test will be provided.
3. Audio versions should be developed using the resource *The Art and Science of Audiotape Book Production* published by the National Library Service for the Blind and Physically Handicapped, Library of Congress. Requirements for narrator, monitor, and proofreader are provided in this document.
4. The National Braille Association in *Tape Recording Manual, Third Edition* (1979) provides instructions for reading mathematics instructional materials. This source recommends that graphic materials be described, if possible, and accompanied by print or tactile versions of the graphics. Such modifications need to be

approved by the test publisher. Moreover, the audio descriptions, print, and tactile versions of the material need to be coordinated. If different departments within the same company or different vendors are responsible for developing and producing the accessible media, one source should be responsible for ensuring that the media are coordinated to the extent specified.

5. Narration of print materials must follow National Library Service (NLS) specifications of minimum acceptable requirements (Specifications #300 and #304).
6. Test publishers must ensure that narrators follow confidentiality and security assurance standards of test materials. Security measures taken when working with audio formats should mirror those required for handling print or braille materials (*Kentucky Core Content Test Administration Manual Supplement*, 2000).
7. Test publishers must give attention to packaging and labeling of the audio test. Audio tests may be packaged for each individual student, with the appropriate print and/or braille supplements needed by the student and the test administrator.
8. Ascertaining whether the audio format will be administered on an individual basis or in a small group setting is important, as the information on the audio format and the information to be provided by the test administrator may vary depending on the setting.
9. The audio test should instruct the student to stop at certain points. Audio procedures must ensure that test takers work only on allowable sections of the test. For example, selected subtests may be recorded on separate cassette tapes or CDs and then collected as required.
10. Directions for navigating through the audio version should be provided in print for the test administrator.
11. Test publishers must select an experienced narrator with appropriate voice, speech, accuracy, and pronunciation skills. (Pronunciation resources are available from NLS.)
12. Narration must be evaluated and proofread to ensure that test content is conveyed accurately and that questions are presented without unintended emphasis on correct answers.
13. A person with identical test materials should monitor the narrator to ensure accuracy during audio production. A third person should be used for the proofreading of audio materials.

Administration of Test Items in Audio Formats

1. Students using audio versions of a test should have had an adequate amount of experience using the specific audio medium and audio equipment independently before the testing situation.
2. Test administration materials should indicate the equipment required by the student for using audio versions of a test. For a cassette tape version of a test, a standard two-track tape player/recorder and headphones will be needed. An audio test on CD will require use of a common CD player or a digital talking book player, depending on the audio file type of the CD. Regardless of the player used, a backup player capable of playing the same audio medium should be available. Access to electrical power or sufficient batteries for player/recorder use should be indicated. Test administrators should be instructed to inspect the equipment functions before testing begins.
3. Test administrators will need to monitor student "movement" through audio versions to ensure that the student maintains the appropriate place in the test and to ensure that the audio version is playing properly. When using a two-sided cassette tape, students may need to be reminded to play the other side of a tape. Prior to administering the test, and in the absence of students, test proctors should spot check audio formats to ensure proper operation of the audio medium and equipment.
4. Students using an audio version of a test must be seated in a quiet area and away from other students so that other students are not disturbed by the audio medium or equipment operation. Students can choose to use headphones.
5. Provisions must be made in the test administration manual for the malfunctioning of audio equipment. Students may have to be tested at a later time if malfunctioning occurs. Students must not be denied access to the administration of a test because of equipment malfunctioning or failure.

GUIDELINES FOR ORAL READING OR SIGNING OF A TEST

Students who are visually impaired or deafblind may need the accommodation of a reader or sign language interpreter. Occasionally, an audio version of a test is not produced, and a test publisher, developer, or assessment personnel will allow the reading or signing (use of sign language) of a test or portions of a test for students whose Individualized Education Program (IEP) specifies this accommodation. Before using oral reading or sign language as an accommodation, careful attention must be given to the constructs being measured. For example, if a section of the test is designed to assess reading as a decoding skill, then the reading or signing of the test to a student would invalidate the results for the intended purpose. In these instances, consider an alternate test or redefine the construct for the individual student. Always check with the test publisher or test developer to determine the construct intent and accommodation use for particular sections of a test.

State policy dictates if passages and stimuli can be read aloud and/or signed for large scale statewide assessments. Check with the District Test Coordinator or with the State Department of Education assessment office for the policy in your state.

For the oral reading or signing accommodation to be allowed on statewide assessments, a student must have had exposure to and have used this accommodation during daily instruction and on classroom tests. This is especially true when mathematical symbols and technical or content-related language is being read and accessed. It is recommended that a student have access to print or braille graphic material even if the reading or signing accommodation is used.

The Educational Testing Service recently posted on their web site *ETS Guidelines for a Test Reader* (July, 2000), which have been made available in Appendix G of this document through special permission from ETS. This document is helpful in outlining the characteristics of a good reader, providing general information for readers, indicating special considerations for multiple-choice tests, addressing mathematics reading, and providing test center procedures for using a reader. In addition, consideration of the following points will ensure appropriate provision of oral reading or signing of a test or portion of a test:

1. Test security and confidentiality standards must be upheld.

2. The test purpose must be specified to ensure that reading or signing a test or portions of a test do not invalidate results or preclude how the results will be reported.
3. An experienced test editor and professionals involved in working with students who require readers or interpreters need to be included in the team of persons that adapt tests which are to be read or signed.
4. A prepared script must be provided for test administrators to ensure a consistent, standardized presentation of the test items.
5. A reader or sign language interpreter must have skills in presenting various types of test materials. For example, someone familiar with mathematical symbols is needed in order to correctly read and convey higher level math formulas and equations.
6. A standard video presentation of the test in sign language is recommended to ensure quality, consistency, pacing, and accuracy.
7. The person selected to read a test to a student should have the characteristics of good voice quality and appropriate speed and tone.
8. The person signing a test must be a trained interpreter and be able to translate in the same method of sign language typically used by the student. It is not recommended that the student's teacher be the interpreter for the testing situation unless a second person is present to monitor for quality and fairness during administration of the test.
9. Voice inflection (regional dialect and pronunciation) familiarity is recommended.
10. The narrator or interpreter must avoid voice inflection that stresses or otherwise indicates the correct answer.
11. The interpreter must avoid facial expressions and body language that may cue the correct response.
12. Students tested through oral reading of the exam must be tested individually to prevent the testing situation from becoming a group effort. Moreover, testing individually helps ensure that each student receives the specific oral reading structure required by his or her individual needs.
13. Directions can be read or signed to groups of students.
14. The interpreter or reader must be allowed to review test administration materials and items on the test to ensure that they have knowledge of the vocabulary/signs required for that assessment. This is important so that the reader/interpreter does not accidentally cue the correct response. The reader/interpreter should have access to pronunciation dictionaries, sign language dictionaries and technical skills manuals to use as references. It is important that the reader/interpreter sign a confidentiality agreement before reviewing the materials to ensure test security.

15. Oral readers and interpreters will need to pause at appropriate intervals to provide the student an opportunity to answer test items or access graphic material provided in print or tactile formats.
16. Graphic materials may be described as detailed in the prescribed script, but must also be made available in print or tactile formats.
17. Oral readers or interpreters must avoid providing an answer to a student's question concerning clarification of testing content. Doing so would provide an unfair advantage. Developing some standard responses to students' questions prior to the testing situation is helpful. For example, you can encourage the student to listen to or watch the signing of the question again.
18. Readers or interpreters may need to provide multiple readings or signings of passages, parts of passages, or items. Unless instructed otherwise in the Test Administration Manual, professional judgment and any guidance provided in the IEP should be used to determine the number of readings necessary.
19. If the oral reader or interpreter is also completing an answer sheet for a student, the transfer of answers must be performed carefully to ensure that the student's answers are recorded as intended. See section on Guidelines for Braille and Large Print Test Response Transcription.
20. Two readers or interpreters should be used for presenting a test or portions of a test to a student. Using two readers or interpreters helps ensure accuracy of test presentation and provides the opportunity for readers or interpreters to rest after 15-20 minutes of presenting test material.

ACCOMMODATIONS IN TESTING STUDENTS WITH VISUAL IMPAIRMENTS

The use of accommodations during testing is intended to level the playing field for any student with a disability. There are, by nature of the disability, certain accommodations that are needed by students with visual impairments. Not all of them discussed in this section are intended for use by all students with visual impairments. Likewise, some needed by students with visual impairments may not be presented here.

Accommodations and various technologies exist to provide learners with visual impairments access to academic instruction and tests. The term "technology" comes under the definition of assistive technology as described in federal law and is considered an accommodation to the testing of students with visual impairments.

The need for one or more accommodations is the decision of the Individualized Education Program (IEP) team and must be recorded on a particular student's IEP. Accommodations used during testing should generally match those used by the student for classroom instruction, assuming they are familiar and effective for the student. Their use is determined by evaluating factors unique to each student and must be implemented as outlined on the IEP. Evaluation of their effectiveness for an individual student is highly recommended. Further, students must be trained to use accommodations. For example, providing a test orally by a qualified person or on computer might actually penalize a student who has not been trained to listen to orally presented material or trained to use a computer for assessment.

Accommodations should be periodically evaluated to ensure that they are still effective for the student. Some may need to be eliminated or revised when and if the student arrives at a point where he or she either does not need the accommodation, it is ineffective, or it is not the most effective option available. If an accommodation is needed by a student and is not on the list of those approved for state use, the local test administrator should contact the state assessment office to request a review of its use.

The next segment presents general as well as specific accommodations for test takers with visual impairments who use braille, large print, and/or audio formats. See Appendix F for additional information on this topic.

Types of Accommodations for Students with Visual Impairments

Presentation Accommodations

1. Braille, large print, and audio are accommodations that some students with visual impairments will use interchangeably. A student may, for example, read a passage in braille and prefer to access a table or chart in an enlarged version of the test. Therefore, students should be allowed to use a large print (or regular print with magnification) and a braille version of the test, if requested.
2. Some students who are visually impaired may need to have read to them the test directions or some of the test items, as long as those items read do not assess reading as a decoding skill. See section on "Some Guidelines for Oral Reading and Signing of a Test."
3. Computer-administered testing is an accommodation that has received some attention through research, though studies concerning its benefit are inconclusive (Tindal & Fuchs, 1999). Generally, however, when a student uses a computer for daily classroom activities, then this accommodation may prove useful during testing if the concepts being tested are not undermined. There are several programs and peripheral materials that can be used to adapt the computer for use by persons with visual impairments. Screen readers, text to speech technology, and keyboard access through braille or switches are available. Depending on the construct being tested, test administrators must verify that the student is inhibited from accessing software or hardware that may provide an unfair advantage. For example, if a student's basic math skills are being assessed and the intent is not to use a calculator, then the keyboard functions or software used for computations must be blocked.
4. When testing allows the use of non-scientific or scientific calculators, students with visual impairments should be permitted to use an equivalent device that has been adapted for use by a visually impaired user. Should a state provide non-scientific or scientific calculators for the sighted population taking the test, then non-scientific or scientific, talking calculators should be provided to students with visual impairments who are taking the test.
5. An abacus is often useful for students when mathematics problems are to be worked without a calculator. The abacus functions as paper and pencil for some students with visual impairments who have received instruction and practice on the use of the abacus. See

Appendix D for the position paper "Use of an Abacus in Test-Taking Situations."

6. Students may want to use manipulative devices, such as a ruler or template, to maintain placement on a line of braille or print. Other tools available for use by visually impaired students include braille or large print rulers and protractors, raised line or bold line graph paper, or raised line or bold line writing paper, to name a few. Contact the American Printing House for the Blind (APH) toll free at 1-800-223-1839 to request a catalog of available accessible materials, or visit APH on the Internet at www.aph.org.

Response Accommodations

1. Students with visual impairments may need to present answers orally to a test administrator who completes the answer sheet. See section on Guidelines for Braille and Large Print Test Response Transcription.
2. Students with visual impairments may need to write answers in the test booklet or on separate paper using a braillewriter or slate and stylus.
The student's answers must then be transcribed and transferred to the answer sheet. See section on Guidelines for Braille and Large Print Test Response Transcription.
3. Students may need to write answers using a word processing program, to be transferred to the answer sheet. Depending on the construct being tested, test administrators must verify that students are inhibited from accessing software or hardware that may provide an unfair advantage. For example, if a student is responding to a writing prompt and the writing will be judged based on correct spelling and grammar, then the spell check function and grammar functions must be disabled.
4. If a student must draw or somehow demonstrate a response, then accessible tools and materials that are typically used by the student for instructional purposes must be made available in the testing environment as long as no unfair advantage is provided. For this type of open response item, it is very important that scoring criteria be well defined and allow for variation in response methods.

Timing Accommodations

1. The use of extended time for test completion is a testing accommodation that has received considerable attention since state testing and accountability systems have been implemented. Research investigating the use of extended time has yielded little conclusive

information about its benefit (Tindal & Fuchs, 1999). However, students with visual impairments will usually require extended time during testing because using braille, print, and audio formats require more time than does reading print with acceptable visual acuity. A study by Wetzel and Knowlton (2000) suggests that experienced adult braille readers may need no more than 50% more time than the stated duration, with additional time allowed for the manipulation of an audio device or the marking of an answer sheet. In contrast, an earlier researcher found that braille readers with far less braille reading experience than the subjects mentioned in the Wetzel and Knowlton study may need between 2 and 3 times as much time as their sighted peers to read the same material (Nolan, 1966, p.1). Traditionally, extended time for testing readers who are visually impaired has been 1½ times, and for braille readers time allotted has been 2 times the amount allowed for regular print readers (Lowenfeld, Abel, & Hatlen, 1969, pp. 91-92). Regardless of the time allowed, the student should be carefully monitored to ensure that time is being used appropriately. If students need an inordinate amount of time, educators may need to investigate the efficiency of the chosen reading mode or initiate remediation to improve speed. Generally, timing accommodations should be individualized according to the test taker's reading rate and testing situation (Wetzel & Knowlton, 2000). See Appendix E on the "Use of Extended Time."

2. Reading braille, print, or listening to material presented orally, especially when accompanied by graphic material, can be a fatiguing and often frustrating experience in a high stakes testing environment for students with visual impairments. Therefore, students may need several brief sessions in which to take the test. Additional break options should also be considered.
3. Students may need to be tested over a longer time period, a week rather than two days, for example. However, any alteration of the timetable will necessitate close supervision to ensure test security.
4. Students may need to be tested at different times of the day depending on their optimal functioning time.

Setting Accommodations

1. Some students with visual impairments may need to be administered a test or select subtests individually, or in small groups as recommended on their IEP, to ensure that the test accommodations needed by the students are implemented without interfering with the concentration and test taking results of other students.
2. If a student is recording answers by using technology that is noisy or is recording answers orally, then he or she must take the test

individually and under the supervision of a test administrator in order to avoid distracting or influencing the responses of other students.

Specific Accommodations in Testing Readers Who Require Enlarged or Large Print

Enlarged print is that which is 14 point, 16 point, or regular print that has been enlarged using magnification devices. Large print is 18-point type and larger. Enlarged print and large print are accommodations.

Some students may choose to use a regular print test and enlarge it manually with a magnification device with which they are familiar. Magnification devices include eyeglass-mounted magnifiers, free standing or handheld magnifiers, and electronic equipment such as the closed circuit television (CCTV) or a computer that has text enlargement software installed. These devices do not provide a student with an unfair advantage. Rather, they are devices that the student requires to access print, and they should be allowed as standard accommodations.

Proper lighting and freedom from glare, while sometimes overlooked, are critical for many readers with visual impairments. Lighting that has been adjusted to suit the student's particular visual needs and minimize glare will help promote sustained reading efficiency.

Specific Accommodations for Audio and Oral Test Administration

Students using an audio version of a test or having the test orally administered as an accommodation should also be allowed to have print (large print or regular print with a magnification device) and braille versions of the test, if requested. A student may wish to listen to a passage by way of audio, but access a table or chart in a large print or braille version of the test. Listening to an oral description of a geometric figure can be difficult or impossible to follow unless an enlarged graphic or a tactile graphic accompanies the oral description.

GUIDELINES FOR BRAILLE AND LARGE PRINT TEST RESPONSE TRANSCRIPTION

Some students with visual impairments will use the accommodation of oral response, written response (on the test booklet or on paper other than the test answer sheet provided by the test publisher), or taped response. Each of these accommodations requires that a person transcribe the answers onto the answer sheet or booklet that will be scored. These guidelines are provided to ensure that transcription is performed appropriately.

1. Confidentiality of the test materials and the student's individual responses is critical. Transcribers must treat the testing materials and the student responses in a secure and confidential manner to ensure test and student identification security.
2. Response transcribers must know braille if transcribing braille responses.
3. It is best if the response transcriber is a "neutral" person, not someone with a vested interest in the student's scores.
4. Response transcribers must provide the exact answers that the student has written using the same punctuation, spelling, and grammar structure. They cannot guess what the student might have meant if answers are incomplete.
5. It is recommended that the response transcriber have a second person proofread the responses to ensure accuracy and fairness to the student. When transcribing graphics that a student has produced, two transcribers should work together in transferring student answers to the answer sheet or booklet.
6. For a period of time, student responses must be maintained in a secure file with test name, copyright year, form and level administered so that the student's actual responses can be reviewed if questions arise.

REPORTING TEST RESULTS OF STUDENTS WITH VISUAL IMPAIRMENTS

Following the requirements of federal law, the scores of students who take assessments in accessible format must be reported for accountability purposes. When reporting the results of students with visual impairments, care must be taken to protect the student's privacy while appropriately representing the test score in consideration of the accommodation(s) used. Students must not be penalized for use of approved accommodations that do not change the test construct and do not provide an unfair advantage to the test taker. Reporting of scores should be a consideration during the test development phase so that all parties understand the purpose of the testing and how the results will be reported and used.

Reporting Test Results for Braille Editions

For most assessments, braille test versions should be regarded as appropriate accommodations for students who use braille daily. Any rescaling of braille test versions that is performed because of item omission should be reported. The scores of those students taking a test in braille should be considered valid as long as the test has been prepared using the guidelines presented in this document. Students who read braille daily need to use braille to respond to test items. This dual use provides an instructional/ assessment validity match. Extensive efforts to "prove" a braille test invalid because of a difference in format are neither recommended nor useful. If the purpose of a test is to determine educational skill progress, the validity can be addressed by confirming that the media used for instruction matches that which is used for assessment.

Reporting Test Results for Large Print Editions

Large print versions of tests also qualify as appropriate accommodations for use during the assessment of students who use large print daily. Unless the assessment has been reformatted, the large print version is a camera-enlarged version of the original version. If the test is altered through removal of shading, or other clutter from graphics, the use of the large print format should be considered an appropriate and valid accommodation. Generally, if reformatting is performed in a manner preserving the original test content, the reformatted version should be considered valid. Producers of large print must work with test publishers to verify that the test material has not been altered in content or purpose in order to maintain test validity.

Reporting Test Results for Audio and Orally Administered Tests

Regarding most assessments, the use of audio and orally administered tests should be considered appropriate accommodations for students who use audio and oral formats on a routine basis to access materials. For tests that assess reading as a decoding skill (visually or tactually), audio and orally administered versions may change the skill being tested, and this should be noted in any report of scoring.

ALTERNATE ASSESSMENTS

The guidelines presented in this section address some specific issues related to accessibility of alternate assessment for students who are blind or visually impaired. The guidelines addressing general state testing that are presented throughout this book are appropriate considerations for providing alternate assessment materials for some students in this population; however, the specific needs of this group must be discussed because so many are non-readers. Best practices in this arena are still being formulated.

General Issues

Students who meet the criteria for alternate assessment, by definition of the federal law, are those students who have significant cognitive disabilities (often referred to as the 1% population assessment). As allowed by federal law, some states have chosen to provide a second alternate assessment for those students who are not expected to meet the state standards as demonstrated on the general state assessment within the same time frame as students taking the general state assessment. In addition, these students are to be working toward the state standards using modified achievement standards as identified by each state. In some states, this alternate assessment (generally referred to as the 2% population assessment) mirrors the general state assessment with the exceptions of having fewer answer choices and in some cases using simpler language in the test items.

Since alternate assessments are very similar to the general state assessment in most cases, the same requirements for accessibility are applicable for the alternate assessment as are outlined for the general assessment.

The needs of students who are blind or visually impaired and have additional disabilities that may qualify them for these alternate assessments, must be considered in the planning and developing of alternate assessment formats and items. Providing accessibility for this population of students requires that test publishers and state personnel have access to professionals who are familiar with braille, large print, and regular print and know the learning styles of these students.

Because many students who take alternate assessment have limited reading ability, it is expected that students who are blind who qualify

for alternate assessment will have very limited braille reading capabilities as well. Likewise, students with low vision who qualify for alternate assessment may have limited ability to read print or large print.

While providing a general assessment in braille for accessibility purposes has its challenges, the provision of an alternate assessment in tactile format can be even more challenging. Alternate assessments typically have formats that either require the student to answer questions by looking at a visual stimulus or demonstrating skills from a checklist of desired tasks. Alternate assessments often include performance tasks, such as picture identification or demonstration of skills using manipulatives. Generally, demonstration of specific skills on alternate assessments can be easily accommodated to allow the student who is blind or visually impaired to perform tasks in the usual way they perform tasks in the classroom. Validity and reliability can usually be maintained when accommodations have been well-documented on a student's IEP and assessment report.

Considerations in Alternate Assessment Design

- Because reading is an issue for the population of students taking alternate assessment, test items often require picture identification. Test administrators must be able to describe the pictures for students who are blind. All test items need to be reviewed to assure that the picture can either be described (accessible) without giving the answer away or that the picture is not needed (inaccessible) and has been omitted. Keeping the task appropriate to the student who takes the test is crucial: For example, it is appropriate to ask a student about the function of an object (i.e. Which of these can you eat— a book, a rock or a banana?). An item would not be accessible if it asked: "Which of these pictures shows a banana?" In this later example, naming the pictures (book, rock, banana) would give the answer away.
- It is recommended that the test publisher provide picture descriptions for the test administrator. Picture descriptions should be developed in conjunction with content experts and state assessment personnel, keeping in mind the construct (skill) being assessed and the cognitive level of the students taking the test.
- If pictures cannot be described without compromising the test item, it is preferable to present manipulatives (objects) to students in lieu of pictures. If this is allowed by the state, such objects should be

real objects (i.e. actual familiar classroom objects and shapes such as pencils; paper; books; notebooks; toys; food; geometric shapes; and counters) and not replicas.

- Replicas or miniatures of animals or of other large objects are not appropriate for use because they cannot be distinguished by the student. These should be used with caution and only if the student is familiar with the models or miniatures.
- Real money should be used rather than a tactile representation.
- Tactile representation of simple graphs (charts) is appropriate. If the test administrator is allowed to read the chart or graph, a script for reading it is preferred and should be included in the test administration manual.
- Tactile representation of shapes (circles, squares, stars, rectangles, etc.) is appropriate and should be used in place of letters, animals, and people to present counting or other mathematics items.
- If the skill being assessed is not reading, then test administrators should be allowed to read aloud all words and passages used in the test items. Care must be taken not to give vocal clues by emphasizing certain words.
- If the construct being assessed is decoding of words (i.e. reading) and simple words and/or passages are provided, then these words and passages must be provided in braille. It is important for state assessment personnel to determine if contracted or uncontracted braille, or both will be provided. This can best be done by surveying a sample of teachers who work with this population to determine which format is preferred or by requesting school districts to specify the number of alternate assessments that are needed in contracted braille and the number needed in uncontracted braille. Making this decision part of the ordering process ensures that the appropriate braille test format is provided for each individual student.
- Large print is defined by research as optimal at 18 points. A sans serif font should be used for best readability.
- It is important that any pictures or graphics provided in print or large print are clear, uncluttered, black line drawings with no grey scale.

REFERENCES

- Albers, Josef, (1963). *Interaction of Color*, Yale University Press, New Haven, CT
- American Association of Workers for the Blind, Association for Education of the Visually Handicapped, & The National Braille Association. (1972). *The Nemeth braille code for mathematics and science notation*. Louisville, KY: American Printing House for the Blind.
- American Educational Research Association (July, 2000). *AERA position statement concerning high-stakes testing in pre K-12 education*. Retrieved August 5, 2008, from <http://www.aera.net/policyandprograms/?id=378>
- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (1999). *Standards for educational and psychological testing*. Washington, DC: American Educational Research Association.
- American Printing House for the Blind (July, 1997). *Guidelines for design of tactile graphics*. Retrieved August 5, 2008 from <http://sun1.aph.org/edresearch/guides.htm>
- Arditi, Aries, (2009). *Effective Color Contrast: Designing for People with Partial Sight and Color Deficiencies*, Lighthouse International, New York, NY
- Arditi, Aries, (2009). *Making Text Legible: Designing for People with Partial Sight and Color Deficiencies*, Lighthouse International, New York, NY
- Arditi, A. (1996). *Typography, print legibility, and low vision*. In R. Cole and R. Rosenthal (Eds.) *Remediation and Management of Low Vision*. St. Louis, Mosby, 237-248.
- Arditi, A. & Knoblauch, K. (1996). "Effective color contrast and low vision." In B. Rosenthal and R. Cole (Eds.) *Functional Assessment of Low Vision*. St. Louis, Mosby, 129-135.
- Birren, Faber,(1969). *Light, Color, and Environment*, Van Nostrand Reinhold Company, Chicago, IL
- Bothwell, Dorr,(1968). *Notan: The light-dark principle of design*, Reinhold Book Corporation, New York, NY

- Braille Authority of North America. (1997). *Braille formats: Principles of print to braille transcription*. Louisville, KY: American Printing House for the Blind.
- Braille Authority of North America. (1994). *English braille American edition* (Rev. ed.). Louisville, KY: American Printing House for the Blind.
- Braille Authority of North America. (1990). *Guidelines for mathematical diagrams, 1983, Addendum 1*. Rochester, NY: National Braille Association.
- Braille Authority of North America. (1983). *Guidelines for mathematical diagrams, 1983, American Printing House for the Blind, Louisville, KY*.
- Chung, S. T. L., Mansfield, J. S., & Legge, G. E. (1998). Psychophysics of reading. XVIII. The effect of print size on reading speed in normal peripheral vision. *Vision Research*, 38, 2949-2962.
- Corn, A. L., & Koenig, A. J. (Eds.). (1996). *Foundations of low vision: Clinical and functional perspectives*. New York: AFB Press.
- Educational Testing Service. (2002). *ETS guidelines for a test reader*. Retrieved August 5, 2008, from ETS Web site:
<http://www.ets.org/portal/site/ets/menuitem.c988ba0e5dd572bada20bc47c3921509/?vgnnextoid=7889bc914be45010VgnVCM10000022f95190RCRD&vgnnextchannel=d7f7be3a864f4010VgnVCM10000022f95190RCRD>
- Ford, Janet. L.,(2009). *Worx: Color and Contrast*, University Press, Minneapolis, MN
- Heller, M. A., Brackett, D. D., & Scroggs, E. (2002). Tangible picture matching by people who are visually impaired. *Journal of Visual Impairment & Blindness*, 96(5), 349.
- Johnstone, C. & Morse, A. (2003). Universal design research, Presentation at the CCSSO Large Scale Assessment Conference, San Antonio, TX.
- Kapperman, G., Heinze, T., & Sticken, J. (2000). Mathematics. In A. J. Koenig & M. C. Ho I brook (Eds.), *Foundations in education: Vol. 2. Instructional strategies for teaching children and youths with visual impairments* (2nd ed., pp. 370-399). New York: AFB Press.
- Kentucky State Department of Education. (2000). *Administration supplement for CTBS/5 and KCCT*[Cassette Recording]. Frankfort, KY: Author.

Kitchel, E. (2001, April). *Large print: Guidelines for creation of test documents for optimum readability by students with low vision*. Unpublished manuscript.

Kitchel, E., (2001). *Guidelines for the Development of Documents for Use by Persons with Visual Impairments*, American Printing House for the Blind, Louisville, KY

Kitchel, E. (2002). *Reading, typography and low vision*. PowerPoint presentation exhibited at the American Printing House for the Blind, Louisville, KY.

Kitchel, E., (2008). *Large Print: Guidelines for Optimal Readability*, American Printing House for the Blind, Louisville, KY

Kitchel, E., (2009). E-mail Correspondence on "Use of Recycled Paper for Persons with Color-Vision Deficiencies." American Printing House for the Blind. July, 2009.

Knoblauch, K., Arditi, A., & Szlyk, J. (1991). "Effects of chromatic and luminance contrast on reading." *Journal of the Optical Society of America A*, 8, 428-439.

Knoblauch, K. & Arditi, A. (1994). "Choosing color contrasts in low vision: Practical recommendations." In A. C. Kooijman, P. L. Looijestijn, J. A. Welling and G. J. vander Wildt (Eds.) *Low vision: Research and new developments in rehabilitation*. IOS Press. Amsterdam, The Netherlands, 199-203.

Koenig, A. J., & Rex, E. (1996). Instruction of literacy skills to children and youths with low vision. In A. L. Corn & A. J. Koenig (Eds.), *Foundations of Low Vision: Clinical and functional perspectives* (pp. 280-305). New York: AFB Press.

Koenig, A. J., & Holbrook, M. C. (1993) *Learning media assessment of students with visual impairment: A resource guide for teachers*. Austin, TX: Texas School for the Blind and Visually Impaired.

Large Print Atlas Focus Group. (August 11, 2001). [The essential characteristics of large print maps]. Unpublished raw data, American Printing House for the Blind.

Legge, G.E. D.G. Pelli, G.S. Rubin & M.M. Schleske. Psychophysics of reading. I. Normal vision. *Vision Research*, 25, 239-252, 1985. (Abstract from Pub Med); (pdf version)

Legge G.E., G.S. Rubin, D.G. Pelli & M.M. Schleske. Psychophysics of reading. II. Low vision. *Vision Research*, 25, 253-266, 1985. (Abstract from Pub Med); (pdf version)

Legge G.E, Ahn S.J., Klitz T.S. & Luebker A. Psychophysics of reading. XVI. The visual span in normal and low vision. *Vision Research*, 37, 1999-2010, 1997. (Abstract from Pub Med); (pdf version)

Legge G.E, J.S. Mansfield & S.T.L Chung. Psychophysics of reading. XX. Linking letter recognition to reading speed in central and peripheral vision. *Vision Research*, 41, 725-734, 2001. (Abstract from Pub Med); (pdf version)

Mahnke, Frank,(1996). *Color, Environment, and Human Response*, Van Nostrand Reinhold, Detroit, MI

Mansfield J.S., Legge G.E. & Bane M.C. Psychophysics of reading. XV. Font effects in normal and low vision. *Investigative Ophthalmology & Visual Science*, 37, 1492-1501, 1996. (Abstract from Pub Med) ; (pdf version)

Lowenfeld, B., Abel, G. L., & Hatlen, P. H. (1969). *Blind children learn to read*. Springfield, IL: Charles C. Thomas.

National Braille Association. (1979). *Tape recording manual*, Third edition. Rochester, NY: Author.

National Library Service for the Blind and Physically Handicapped, Library of Congress. (1997). *The art and science of audio book production*. Washington, DC: Author.

National Library Service for the Blind and Physically Handicapped, Library of Congress. (2000, July). *Book mastering* (Specification #300). Washington, DC: Author.

National Library Service for the Blind and Physically Handicapped, Library of Congress. (2000, November). *Requirements for narration and copies of cassette magazines* (Specification #304). Washington, DC: Author.

Nolan, C. Y. (1966). *Reading and listening in learning by the blind*. Unpublished report, American Printing House for the Blind, Louisville, KY.

Pearson Educational Measurement, *Bulletin*, Issue 4, June 2007. Retrieved June 29, 2009 from:
http://www.pearsonedmeasurement.com/bulletin/Bulletin_4_Final.pdf

Phillips, S. E. (1994). High-stakes testing accommodations: Validity versus disabled rights. *Applied Measurement in Education*, 7(2), 93-120.

- Phillips, S. E. (1994). High-stakes testing accommodations: Validity versus disabled rights. *Applied Measurement in Education*, 7(2), 93-120.
- Poppe, K., & Otto, F. (2002). *Tactile graphics: Guidelines for good tactile graphics*. PowerPoint presentation presented at the American Printing House for the Blind, Louisville, KY.
- Ross, D. B. & Robinson, M. C. (2000). Social studies and science. In A. J. Koenig & M. C. Ho I brook (Eds.), *Foundations in education: Vol. 2. Instructional strategies for teaching children and youths with visual impairments* (2nd ed., pp. 330-369). New York: AFB Press.
- Spence, D., & Osterhaus, S. A. (2000). Basic principles for preparing tactile graphics. In *American Foundation for the Blind braille literacy mentors in training: The next generation - teaching special codes: Nemeth, CBC, and tactile graphics* - Workshop in Fremont, CA (August 7-9, 1997) and Atlanta, GA (September 11-13, 1997). Retrieved August 5, 2008, from the American Foundation for the Blind Web site: [http:// www.afb.org/info_document_view.asp?documentid= 374](http://www.afb.org/info_document_view.asp?documentid=374)
- Thompson, S.J., Johnstone, C. J., & Thurlow, M. L. (2002). *Universal design applied to large scale assessments*. NCEO Synthesis Report 44. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes. Retrieved August 5, 2008, from <http://education.umn.edu/NCEO/OnlinePubs/Synthesis44.html>
- Thompson, S., & Thurlow, M. (2002) *Universally designed assessments: Better tests for everyone!* (Policy Directions, No. 14). Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes. Retrieved August 5, 2008, from <http://cehd.umn.edu/nceo/OnlinePubs/Policy14.htm>
- Tindal, G., & Fuchs, L. (1999). *A summary of research on test changes: An empirical basis for defining accommodations*. Lexington: University of Kentucky, Mid-South Regional Resource Center Interdisciplinary Human Development Institute. Retrieved August 5, 2008, from <http://www.rrfcnetwork.org/images/stories/MSRRC/DOCS/ACCOMMODATIONS/tindal&fuchs%20march%202000.pdf>
- Trent, S. D., & Truan, M. B. (1997). Speed, accuracy, and comprehension of adolescent braille readers in a specialized school. *Journal of Visual Impairment & Blindness*, 91(5), 494-500.

- Wetzel, R., & Knowlton, M. (2000). A comparison of print and Braille reading rates on three reading tasks. *Journal of Visual Impairment & Blindness*, 94(3), 146-154.
- Wormsley D. & D'Andrea, F. M. (1997). *Instructional strategies for braille literacy*. New York: AFB Press.

RESOURCES

- Allman, C. (2001). *Guidelines for providing state assessments in alternative formats for students with visual impairments*. Unpublished manuscript. Retrieved August 4, 2008, from Texas School for the Blind and Visually Impaired Web site: <http://www.tsbvi.edu/Education/state-assess.htm>
- American Educational Research Association, American Psychological Association, National Council on Measurement in Education (1999). ***Standards for Educational and Psychological Testing***. Washington, DC: American Psychological Association.
- Amick, N., Corcoran, J., & The American Printing House for the Blind. (1997). *Guidelines for design of tactile graphics*. Retrieved August 5, 2008, from The American Printing House for the Blind, Department of Educational Research Web site: <http://www.aph.org/edresearch/guides.htm>
- Arditi, A. (1999). *Making text legible: Designing for people with partial sight*. Retrieved August 5, 2008, from the Lighthouse International Web site: http://www.lighthouse.org/print_leg.htm
- Brown, L. (1997). *Tactile graphic development for students who are blind or visually impaired*. Portland, OR: Oregon Textbook & Media Center for the Visually Impaired.
- Bunch, M. B. (2002). *Item review 101: Where we've been, where we're going, how we'll get there*. Paper presented at the annual meeting of the Council of Chief State School Officers, Palm Desert, California, June 25, 2002.
- Duckworth, B. J. (1993). Adapting standardized academic tests in braille and large type. *Journal of Visual Impairment & Blindness*, 87(10), 405-407.
- Joint Forum for General Certification of Secondary Education (GCSE) and General Certificate of Education (GCE). (1998). *Specification for the preparation and production of examination papers for visually-impaired candidates*. Cambridge, England: Author.

- Kitchel, E., & Evans, W. (2001). Student survey of large print. In *Large print documents: Things to keep in mind*. PowerPoint presentation exhibited at the American Printing House for the Blind, Louisville, KY.
- Mastergeorge, A. M., & Miyoshi, J. N. (1999). *Accommodations for students with disabilities: A teacher's guide*. Los Angeles: National Center for Research on Evaluation, Standards, and Student Testing.
- National Center on Educational Outcomes (2001). *A self-study guide to implementation of inclusive assessment and accountability systems*. Minneapolis, MN: University of Minnesota.
- National Library Service for the Blind and Physically Handicapped, Library of Congress. (1991, January). *Blank tape, open reel 7 inch copying* (Specification #703). Washington, DC: Author.
- National Library Service for the Blind and Physically Handicapped, Library of Congress. (1990, December). *Cassette book duplication* (Specification #202). Washington, DC: Author.
- National Library Service for the Blind and Physically Handicapped, Library of Congress. (1995, July). *Four-track monaural open reel intermaster* (Specification #203). Washington, DC: Author.
- National Library Service for the Blind and Physically Handicapped, Library of Congress. (1996, February). *Labeling and packaging cassette books* (Specification #403). Washington, DC: Author.
- National Library Service for the Blind and Physically Handicapped, Library of Congress. (1997, June). *Labeling and packaging cassette magazines* (Specification #404). Washington, DC: Author.
- National Library Service for the Blind and Physically Handicapped, Library of Congress. (1994, October). *Library grade cassette shells* (Specification #701). Washington, DC: Author.
- National Library Service for the Blind and Physically Handicapped, Library of Congress. (2001, August). *Requirements for the distribution of source files, the review of books produced under NLS contracts, and the qualification of blank recordable compact discs used for production* (Specification #1202). Washington, DC: Author.
- Quenemoen, R. F., Thompson, S. J., Thurlow, M. L., & Lehr, C. A. (2001). *A self-study guide to implementation of inclusive assessment and accountability systems: A best practice approach*. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes. Retrieved August 4, 2008, from <http://cehd.umn.edu/NCEO/OnlinePubs/workbook.pdf>

- Simpson, J., & McBride, B. (2000). *Standardized test materials: Educational materials/tactile graphics*. Rochester, NY: National Braille Association.
- Spence, D. (2002). *Guidelines for braille test adaptations of the Texas assessment of academic skills*. Retrieved August 4, 2008, from the Texas School for the Blind and Visually Impaired Web site: <http://www.tsbvi.edu/math/brl-taas-guideline.htm>
- Spence, D., & Osterhaus, S. A. (2000). Deciding whether to use a tactile graphic. In *American Foundation for the Blind braille literacy mentors in training: The next generation - teaching special codes: Nemeth, CBC, and tactile graphics - Workshop in Fremont, CA (August 7-9, 1997) and Atlanta, GA (September 11-13, 1997)*. Retrieved August 4, 2008, from the American Foundation for the Blind Web site: http://www.afb.org/info_document_view.asp?documentid=376
- Student Assessment Division of the Texas Education Agency (n.d.). *Report on braille adaptations of the Texas assessment of academic skills*. Retrieved August 4, 2008, from the Texas School for the Blind and Visually Impaired Web site: <http://www.tsbvi.edu/math/brl-taas.htm>
- Sutton, J. (2002). A guide to making documents accessible to people who are blind or visually impaired. Retrieved August 4, 2008, from the American Council of the Blind Web site: <http://www.acb.org/accessible-formats.html>
- Thurlow, M., Quenemoen, R., Thompson, S., & Lehr, C. (2001). *Principles and characteristics of inclusive assessment and accountability systems* (Synthesis Report 40). Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes. Retrieved August 4, 2008, from <http://cehd.umn.edu/NCEO/OnlinePubs/Synthesis40.html>
- Wyver, S. R., Markham, R. & Hlavacek, S. (1999). Visual items in tests of intelligence for children. *Journal of Visual Impairment & Blindness*, 93, 663-665.

APPENDIX A BRAILLE VERSUS AUDITORY ACCESS: A DISCUSSION

Federal law requires that consideration be given to accommodations in testing students with disabilities. With this focus comes the responsibility of the educator to identify needed and useful accommodations for students with disabilities. For students with visual impairments, accommodations that provide access to print can vary considerably. The range of accommodations includes braille, tactile graphics, large print, regular print with magnification, auditory media, or any combination of these accessible media. This discussion suggests methods for identifying the most appropriate accessible media, identifies uses of braille and audio materials, and provides recommendations for consideration in choosing testing media.

Since the early 1990s authors have identified methods of evaluating the "mode of reading" or method of print access for students with visual impairments (Koenig & Holbrook, 1993; Wormsley & D'Andrea, 1997). Federal law indirectly requires that print access be evaluated by defining the consideration of braille as a mode of reading for students with visual impairments as part of the Individualized Education Program (IEP) process. A major part of the early and ongoing assessment of a visually impaired student's unique needs is the use of various media to access printed materials. Identification and use of appropriate media includes:

- Determination of the student's primary and secondary sensory channels for learning through observation of the student's use of vision, use of touch, and use of hearing in familiar and unfamiliar settings, at structured times and unstructured times, and in outdoor settings as well as indoor settings (Koenig & Holbrook, 1993)
- Attention to the student's current print access needs, instruction and remediation in accessible media or alternate media, and recognition of future needs in print access for the student
- Provision of initial sensory channel identification and ongoing sensory channel use to determine changes in use and need for instruction in additional media access skills
- Instruction in a variety of accessible media that could be used by the student
- The opportunity to learn skills that enable the student to choose the appropriate medium for various tasks

Specifically, the appropriate uses for braille are determined by each individual who uses braille. Most blind individuals access printed materials by using a combination of media. One issue in using braille has typically been the lack of braille materials. Currently, there are improved methods of providing braille materials through the expansion of technology. Computer software and hardware that translate print to braille, provide braille displays, and emboss braille through a translation program are used to provide most braille text in a timely fashion. It should be noted that print with highly graphic and technical content does not translate to braille easily and with the type of accuracy expected for testing materials.

Congress has recently passed legislation that will ensure accessibility of instructional materials in braille for students with visual impairments. While assessment materials are not included in this legislation, it seems that making instructional materials readily available and accessible will drive the need for a similar pattern in the testing arena.

Persons with visual impairments routinely use auditory means to access large volumes of literary or recreational reading material, such as novels or magazines. The expansion of technology and the ability to translate printed text into speech has enabled persons with visual impairments to access information via computer software and/or hardware. Additionally, many persons with a visual impairment make use of a screen reader for print access, a skill that requires some training.

The availability of a wide range of ways to access print is important for persons with visual impairments. This range of availability should exist for students but should not be confused with, or used as a replacement for, the skill of learning to read (decode language). If society values the reading of materials as a decoding skill, then access to printed material for students who are visually impaired must include the learning of reading through tactual or visual processes. For some individuals the reading process is too tedious to be efficient. These individuals may choose to use primarily auditory materials as adults, but as students they should be given the opportunity to learn reading as a decoding skill.

The skills involved in reading braille, reading print, and listening to audio materials are unique to each medium. Therefore, during the development of test items, test publishers must be clear about which constructs are to be assessed by a particular item. If reading as a decoding skill is to be assessed, then a fair assessment can only result if the student is provided with material that can be visually or tactually read. If comprehension is the construct being assessed, then the test developer must determine whether reading comprehension or listening comprehension is the skill to be assessed. Comprehension would need to be defined to ensure that students are using appropriate accommodations when taking a particular test.

The following recommendations should be reviewed when considering the use of braille or audio materials for students with visual impairments:

1. Braille and tactile graphics interpretation should be taught as media access skills so that students may learn reading as a decoding skill and have the option of using braille and tactile materials.
2. Auditory listening skills should be taught as a media access skill so that students can learn listening comprehension skills and have the option of using audio materials.
3. Test publishers must be certain about the construct being assessed on all test items. This enables educators and test administrators to make valid judgments about appropriate accommodations for students with visual impairments during test administration and helps to ensure correct interpretations of test results.

References

- Koenig A. J., & Holbrook, M. C. (1993). *Learning media assessment of students with visual impairment: A resource guide for teachers*. Austin, TX: Texas School for the Blind and Visually Impaired.
- Wormsley D. & D'Andrea, F. M. (1997). *Instructional strategies for braille literacy*. New York: AFB Press.

APPENDIX B

TEMPLATE FOR TEST ADMINISTRATION NOTES FOR BRAILLE TESTS

Name of Test:

Edition of Test:

Section:

Preliminary Pages Transcriber's Notes:

Special Symbols Page:

General Test Direction Notes:

Print Page Number(s)	Braille Page Number(s)	Accompanying Test Administration Manual Page Number(s)	Item Number(s)	Notes

Explanation of Fields on Test Administration Notes for Braille Tests

Name of Test: Provide the full and exact name of the test.

Edition of Test: Provide the copyright or other edition listing to further identify the test.

Section: Provide the section name and other identifying information.

Preliminary Pages Transcriber's Notes: Provide in print the exact wording of transcriber's notes that refer to preliminary pages in the braille version of the test. Indicate the page number of the transcriber's notes.

Special Symbols Page: Provide in print the exact wording of the special symbols page that may be present within the braille version of the test. Indicate the page number of the special symbols page.

General Test Direction Notes: Provide information about the methods a student may use when responding to test items that differ from print test versions and which require special equipment or attention.

Print Page Number(s): Provide the location of test material within the regular print version of the test.

Braille Page Number(s): Provide the location of test material within the braille version of the test.

Accompanying Test Administration Manual Page Number(s): Provide the page number(s) in the test administration manual that correspond with each regular print test page.

Item Number(s): Provide the test item number(s) that appear on that print page.

Notes: Provide comments that indicate transcriber's notes specific to particular pages, changes made to the braille version of the test, and changes made to directions, as listed in the test administration manual or on the test.

APPENDIX C TEMPLATE FOR TEST ADMINISTRATION NOTES FOR LARGE PRINT TESTS

Name of Test:

Edition of Test:

Section:

General Test Direction Notes:

Print Page number(s)	Large Print Page Number(s)	Accompanying Test Administration Manual Page Number(s)	Item Number(s)	NOTES

Explanation of Fields on Test Administration Notes for Large Print Tests

Name of Test: Provide the full and exact name of the test.

Edition of Test: Provide the copyright or other edition listing to further identify the test.

Section: Provide the section name and other identifying information.

General Test Direction Notes: Provide information about the methods a student may use when responding to test items that differ from print test versions and which require special equipment or attention.

Print Page Number(s): Provide the location of test material within the regular print version of the test.

Large Print Page Number(s): Provide the location of test materials within the large print version of the test.

Accompanying Test Administration Manual Page Number(s):
Provide the page number(s) in the test administration manual that correspond with each regular print test page.

Item Number(s): Provide the test item number(s) that appear on that print page.

Notes: Provide comments that indicate changes made to the large print version of the test and changes made to directions as listed in the test administration manual or on the test.

APPENDIX D POSITION PAPER: USE OF AN ABACUS IN TEST-TAKING SITUATIONS

By Terrie Terlau and Fred Gissoni

Definition and Description

The mathematical abacus is a frame with beads or balls that can be slid on wires or in slots for calculating or teaching arithmetic (The American Heritage Dictionary of the English Language, 1996). The abacus has been used as a calculation device in Europe, Japan, China, and the Middle East since the third century A.D. It continues to be used widely in Japan (<http://www.syuzan.net/english/education/education.html>).

The Cranmer abacus was developed as a calculation device for persons who are blind or visually impaired and is currently produced by the American Printing House for the Blind (APH: Abacuses, 2001). The Cranmer abacus frame is made of high impact plastic, measures 6-1/8 x 3-1/4 x 7/16 inches, and contains thirteen vertical rods and one horizontal cross bar. Four beads can be moved vertically on each of the thirteen rods below the cross bar and one bead can be moved vertically along the rods above the cross bar.

Abacus Functionality

When calculating with the Cranmer abacus, vertical rods represent units, tens, hundreds, etc. Numbers are recorded and manipulated by moving beads toward the cross bar on their respective rods.

The abacus is a passive device. It is not a calculator or a slide rule. The abacus does not perform mathematical operations. It does not contain information that would enable an abacus user to achieve calculation results without a solid knowledge of mathematical concepts and relationships. Abacus users produce calculations as a result of their understanding of the behavior of numbers, not because of any inherent property of the abacus.

Both abacus and pencil-and-paper users must learn strategies for performing mathematical operations. The primary difference in the activity of abacus and pencil-and-paper users is that pencil-and-paper users apply and record steps in these operations by writing while abacus users apply and record these processes by moving abacus beads.

Persons who are blind or visually impaired and who have had appropriate abacus instruction can use the abacus to perform addition, subtraction, multiplication, division, and square and cube roots. The abacus does not permit permanent storage of problem solutions because beads must be rearranged to perform subsequent problems. After each calculation using an abacus, answers can be recorded in a variety of formats including braille, large print, voice recording, word processing, or dictation into an electronic device.

Position Statement

Whenever a test-taker is allowed to use a pencil and paper for working calculations, an abacus should be considered an equivalent substitution.

References

APH: Abacuses. (2001). Retrieved August 6, 2008 from
<http://www.aph.org/tests/abacuses.htm>

The American Heritage Dictionary of the English Language (3rd edition).

The League of Japan Abacus Associations. (2001). Soroban in education and modern Japanese society. Retrieved August 1, 2008, from
<http://www.syuzan.net/english/education/education.html>

APPENDIX E POSITION PAPER: USE OF EXTENDED TIME

Introduction

In addition to the use of braille and large print, the use of extended time is also a commonly used accommodation for students with visual impairments. This position paper provides a brief summary of the results of research on the use of extended time in testing students, while suggesting best practices for implementing this accommodation.

Research

For several years, researchers have suggested that students with a visual impairment need more time to complete assignments and tests (Harley & Lawrence, 1984; Kederis, Nolan, & Morris, 1967; Morris, 1974; Spungin, 2002; Bradley-Johnson, 1994).

Moreover, some researchers have reported results indicating that students with a visual impairment generally read at a slower rate than students without a visual impairment (Packer, 1989; Legge, et. al., 1985, 1989; Wetzel & Knowlton, 2000). Not only does the reading of braille and large print generally require more time than reading regular print, but the time needed to explore and interpret pictorial information presented as tactile or enlarged graphics can be a tedious and time-consuming process. Therefore, extended time seems to be an obvious accommodation for this population. Some suggested time extensions based on classroom experience or research include

- 1.5 to 2 times for students with low vision (Gompel, van Bon, & Schreuder, 2004),
- 2.5 times for braille and 1.5 times for large print (Morris, 1974),
- 1.5 times for all students with a visual impairment (Spungin, 2002),
- 2 times for braille (Kederis, Nolan & Morris, 1967),
- More than 2 times for braille and a little less than 2 times for visually impaired readers who read print (Packer, 1989), and
- .5 times for experienced adult braille readers (Wetzel & Knowlton, 2000).

The most recent synopsis of research on accommodations demonstrates the wide range of results among studies seeking to validate the use of extended time during testing. Based on the varied results, authors

recommend that a well-designed test for standard administration be untimed (Tindal & Haladyna, 2002).

Research conducted by the National Center on Educational Outcomes (NCEO) summarizes at least four studies in which the use of extended time had a positive effect on student test scores. NCEO provided preliminary results of a Universal Design Research project which suggest that unlimited time reportedly helps students "think better," a conclusion drawn after interviewing students who had completed a universally designed test (with no time limits) and a regular test (with time limits) (Presentation: Universal Design Research, C. Johnstone & A. Morse, June 24, 2003 at CCSSO Large Scale Assessment Conference, San Antonio, TX).

Several authors seem to agree that timed conditions may not allow students to reflect their full abilities on achievement tests (Tindal & Fuchs, 1999) and that adequate time should be provided for all students. Parr, et. al. (1996) argue that extended time examinations taken under ideal circumstances can be more equitable and practical than timed examinations. In another investigation, Marquart (2000) found that extended time failed to significantly improve the test scores of disabled students. The author, however, does conclude that extended time likely produces a more accurate measure of a student's skill by helping to reduce test anxiety and by allowing a greater opportunity to use good test taking strategies.

Conclusions

Extended time is a commonly used accommodation for students with visual impairments. Some literature concerning the subject recommends that the accommodation of extended time be of specific duration, e.g., 2.5 times for braille readers and 1.5 times for large print readers. Certainly, a topic in need of additional information is a comparison of time used among the following: a braille reader who must explore and interpret tactile graphics, a large print reader who must visually examine and synthesize enlarged graphics, and a sighted student using regular print test materials. Moreover, several current researchers suggest placing less emphasis on designating a uniform, "one size fits all" duration of extended time as an accommodation for disabled students during testing. Rather, these researchers suggest that the accommodation of extended time consist of "adequate time." That is, a specific length of time, which must be determined by educators through careful assessment of the student's physical disability, skills, and needs. In lieu of extended time, some test administrators are finding that more frequent breaks are effective for braille and large print test takers. Once

the need for, and duration of, adequate time and/or breaks has been assessed, educators should include that information on the student's IEP, ensure use of the accommodation, and monitor its use.

Position Statement

To implement extended time or adequate time for students with visual impairments, four basic steps should be followed:

1. Assess the need for extended time and frequent breaks.
2. Include specific information about extended time and the need for breaks on the student's Individualized Education Program (IEP).
3. Ensure that extended time and frequent break accommodations are implemented as specified during testing.
4. Monitor the student's use of extended time to assure that the student uses extended time/break time appropriately and that the student is on task.

References

- Bradley-Johnson, S. (1994). *Psychoeducational assessment of visually impaired and blind students: Infancy through high school*. (2nd ed.). Austin: Pro-Ed.
- Gompel, M., van Bon, W. H. J., & Schreuder, R. (2004). Reading by children with low vision. *Journal of Visual Impairment & Blindness*, 98(2), 77-89.
- Harley, R. K. & Lawrence, G. A. (1984). *Visual impairment in the schools*. (2nd ed.). Springfield, IL: Charles C. Thomas.
- Kederis, C. J., Nolan, C. Y., & Morris, J. E. (1967). The use of controlled exposure devices to increase braille reading rates. Unpublished manuscript, The American Printing House for the Blind.
- Legge, G.E., Rubin, G.S., Pelli, D.G., & Schleske, M.M. (1985). Psychophysics of reading. II. Low vision. *Vision Research*, 25, 253-266.
- Legge G. E., Ross, J. A., Maxwell, K. T., & Luebker, A. (1989). Psychophysics of reading. VII. Comprehension in normal and low vision. *Clinical Vision Sciences*, 4(1), 51-60.
- Marquart, A. M. (2000, June). *The use of extended time as an accommodation on a standardized mathematics test: An investigation of effects on scores and perceived consequences for students of various skill levels*. Paper presented at the Annual

Meeting of the Council of Chief State School Officers for the Large Group Session, "Studies of the Effects and Consequences of Accommodations on Student's Achievement Test Scores" Snowbird, UT.

Morris, J. E. (1974). The 1973 Stanford Achievement Test Series as adapted for use by the visually handicapped. *Education of the Visually Handicapped*, 6(2), 33-46.

Packer, J. (1989). How much extra time do visually impaired people need to take examinations: The case of the SAT. *Journal of Visual Impairment & Blindness*, 83(7), 358-360.

Parr, P., Levi, N., & Jacka, K. (1996). *Unspeeded examinations: An equitable practical method of assessment*. (ERIC Document Reproduction Service No. ED397108)

Spungin, S. J. (Ed.). (2002). *When you have a visually impaired student in your classroom: A guide for teachers*. New York: AFB Press.

Tindal, G. & Fuchs, L. (1999). A summary of research on test changes: An empirical basis for defining accommodations. Lexington: University of Kentucky, Mid-South Regional Resource Center Interdisciplinary Human Development Institute. Retrieved June 4, 2008 from <http://www.rrfcnetwork.org/images/stories/MSRRC/DOCS/ACCOMMODATIONS/tindal&fuchs%20march%202000.pdf>

Tindal, G. & Haladyna, T. M. (Eds.). (2002). *Large-Scale assessment programs for all students: Validity, technical adequacy, and implementation*. London: Lawrence Erlbaum Associates.

Wetzel, R. & Knowlton, M. (2000). A comparison of print and braille reading rates on three reading tasks. *Journal of Visual Impairment & Blindness*, 94(3).

APPENDIX F POSITION PAPER: ACCOMMODATIONS FOR TESTING STUDENTS WITH VISUAL IMPAIRMENTS

By Carol Allman, Ph.D.

Introduction

Accommodations and technologies exist for the purpose of providing a disabled student with access to academic materials that may otherwise be inaccessible. The term "technology" comes under the definition of assistive technology as described in federal law and is considered an accommodation. Accommodations and assistive technologies needed by students with visual impairments should be outlined on the student's Individualized Education Program (IEP). These accommodations should be monitored periodically for their effectiveness with the individual student and revised or updated as appropriate. **Any accommodations provided for students during the testing window should be ones typically used by that student in the classroom and not new or unfamiliar ones.**

This paper provides an overview of accommodations in testing that might be effective for students with visual impairments and should be documented on their IEP. Five major categories of accommodations that include presentation, response, setting, scheduling, and special tools are discussed. Not all of the accommodations presented in this paper are intended for use by every student with a visual impairment. Likewise, some accommodations needed by students with visual impairments may not be discussed.

Determining Accommodations

The need for accommodations is the decision of the Individualized Education Program (IEP) team and must be recorded on the IEP. Accommodations used in testing should match those used by the student for classroom instruction. Accommodation use is determined by evaluating factors unique to each student and must be implemented as outlined on the IEP. Evaluation of the effectiveness of accommodations for individual students is highly recommended. Further, students must be trained to use accommodations. For example, providing a test orally or on a computer might actually penalize a student who has not been trained to listen to material presented orally or trained to use a computer for assessment. Accommodations should be

continually evaluated to ensure that they are effective for the student. Some accommodations should be eliminated if the student arrives at a point where he or she either does not need the accommodation or the accommodation is ineffective.

Presentation Accommodations

Students with visual impairments have several options for accessing test materials. According to data collected by the American Printing House for the Blind (2003), 9% of the visually impaired student population use braille as their primary mode of reading. Approximately 26% use large print materials, while only 6% are auditory readers who would require test materials to be presented in audio format. Prereaders (27%) may use auditory materials until they learn braille or print. Of the nonreaders (32%), some may use braille, large print, and audio on a very limited basis. However, there are many whose significant cognitive disability would inhibit them from successfully using braille, large print, and audio materials. Most of these students are involved in educational programs that do not rely heavily on traditional reading media and modes of learning and communication. This population of students may use augmentative or tactile communication systems and might qualify for alternate assessment in the statewide assessment program. The remainder of the visually impaired school-aged population who are readers access standard print materials with or without low vision aids.

Braille, large print, magnified print, and audio presentation are accommodations that allow visually impaired students access to the testing environment. Some of these students may use a combination of these media to complete a single test. A student may, for example, read a passage in braille and prefer to access a table or chart in a large print or magnified format. Students using an audio version of a test as an accommodation would also be allowed to use print (large print or standard print with a magnification device) and/or braille versions of the test, if requested.

Further, a student may prefer to listen to an orally presented passage but access a table or chart in a large print or braille version of the test. If a multimedia presentation is used, the various media must be coordinated to ensure accuracy and accessibility. It should be noted that computer-assisted testing is becoming very popular and requires special attention to be accessible for students with visual impairments.

Braille and Tactile Graphics

Braille is a system of raised dots that represent words and letters. It is used as a presentation method for those students who typically read braille for classroom instruction. Braille may be presented as contracted (using short forms for words as outlined in English Braille Code) or in uncontracted format (using no short forms, i.e., spelling each word letter by letter). Most students will use the standard contracted braille. A few students, such as those who are just learning braille in the early grades or who are newly blinded, may need uncontracted braille to access a test.

The production of a braille test is a unique process that often necessitates the review and limited editing of test directions and test items so that the items are understandable when presented in braille and tactile graphics format. Such editing may involve subtle word changes to directions (replacing "circle the answer" with "mark the answer"), relocation of stimulus information (moving the question above a graph or chart), simplification of a graph or chart (removing extraneous information without deleting answers or foils), or replacing an item that cannot be reflected in braille with an item of equal weight, value, and difficulty (replacing an item that requires strictly visual skills, such as visual illusion, with a similar item that assesses the same concept and is more accessible to blind students).

However, an item need not be replaced or omitted simply because it is presented in a manner that requires some visual interpretation. For example, the concept of understanding a shadow and what causes a shadow is an important concept for a blind student to understand. Therefore, this skill can be assessed through use of descriptions and tactile graphics. If, however, a test or particular subject includes a high percentage of visual items, then consideration may be given to substituting some of the "visual" items. Students who read using braille are expected to meet the same standards that other students meet, even though they are doing so tactually. The process of editing a test for braille production should in no way simplify or reduce the difficulty of the test material.

Once test material has been edited for braille transcription, qualified persons will transcribe the print into braille by using the recommended edits and guidelines for braille transcription and formatting. The transcribed braille test must be proofread and produced so that the braille reader receives a high quality test in the same timely manner as sighted students receive their test.

Large Print Text and Graphics

Large print is considered such when it is 18-point type and larger. Enlarged print is typically that which is 14 point, 16 point, or standard-sized print that has been enlarged using magnification devices. Enlarged print and large print are accommodations.

Large print should be produced by using an electronic version of the test to reformat the test so that fonts are larger, fewer items are on a page, graphics are contained on one page, answer choices are presented with the questions, and attention is given to improving the contrast and reducing the shading and gray scale that interferes with reading the material presented. The process of using a photocopier to enlarge test content should be avoided since this method lacks the control needed to ensure that all test material (exponential numbers, footnotes, and graphic material) is represented in a readable point size, that text is clear and without gray scale interference, and that problems dealing with measurement are presented accurately. For example, a butterfly measuring two inches in the standard print test must remain two inches in the large print version.

Some students will use magnification devices (discussed in more detail in the section of this paper on special tools considerations) with large print or with standard print to access test materials.

Therefore, it is important that the standard print version of a test exhibit good contrast and a clear print style to allow effective use of magnification.

Audio

Generally, students with visual impairments should be expected to read materials by using print or braille. Access to print is a critical literacy skill for all individuals. However, where audio presentation is allowed, and for reducing the time needed to complete a test, some students who are visually impaired may need directions or some test items presented orally to them.

Audio presentation of print materials is a presentation accommodation allowing for all or part of a test to be presented on cassette tape, CD, computer and specialized screen reader or text reader software, or read aloud to a student. Students should use these accommodations only if they use audio media for classroom instruction. The skill of listening to spoken material and manipulating a computer, cassette tape player or CD player is

different from the skill needed to read and interpret print or braille. Therefore, navigating through a cassette tape, computer with screen reader, or audio CD in a testing environment requires practice. Further, the test purpose must be specified to ensure that oral presentation of a test or portions of a test do not invalidate results or preclude the reporting of test results. For example, if the reading skill of decoding print (or braille) is being assessed, audio presentation of the text could invalidate the purpose of the test.

The transfer of test material onto audio tape requires a process similar to the construction of test materials in braille. Print text must be edited for audio presentation, produced in audio format by experienced audio engineers, and then proofed for accuracy. Additionally, any graphic material must be described and provided as a supplement in braille, large print, or standard print. Accurately describing graphic material requires attention to the critical components of the graphic and careful consideration of which details can be included in or omitted from the description without providing the answer or excluding the foils imbedded in the question.

If a test or part of a test is to be read to a student, there are recommended practices for ensuring that this accommodation is provided correctly:

- A reader must be skilled in presenting various types of test materials. For example, a reader familiar with mathematical symbols is required for the correct delivery of higher level math formulas and equations.
- The person selected to read a test to a student should exhibit good voice quality, appropriate regional dialect, pronunciation, speed, and tone.
- The reader must avoid voice inflection that stresses or otherwise indicates the correct answer to test items.
- Prior to the testing situation, difficult words within the test material must be reviewed by the person assigned to read the test. Pronunciation dictionaries should be used as references.
- Readers must pause at appropriate intervals so that the student has an opportunity to answer test items or access graphic material provided in print or tactile formats.
- Readers must avoid answering a student's question concerning clarification of testing content. Doing so would provide an unfair advantage. Developing some standard responses to students' questions prior to the testing situation is helpful. For example, instead of answering a student's question about test content, the reader can encourage the student to listen to the question again.
- Readers may find it necessary to provide multiple readings of passages, parts of passages, or items. While addressing the needs and requests of

the test taker, the reader should also use professional judgment to determine the number of readings necessary.

- Two readers should be used for presenting a test or portions of a test to a student. Using more than one reader helps ensure accuracy of test presentation and provides the opportunity for readers to rest during the presentation of test material.
- Students tested through oral reading of the exam must be tested individually to prevent the distraction of other students. Moreover, the testing of students individually helps ensure that each student receives the specific oral reading structure required by his or her specific needs.

Computer-assisted Testing

Computer-assisted testing is an accommodation that has received some attention through research, though studies concerning its benefit are inconclusive (Tindal & Fuchs, 1999). Generally, however, when a student uses a computer for daily classroom activities, then this accommodation may prove useful during testing if the concepts being tested are not undermined.

There are several programs and peripheral materials that can be used to adapt the computer for use by persons with visual impairments. Screen readers, text to speech technology, and accessible keyboard access through braille or switches are all available. Depending on the construct being tested, test administrators must verify that the student is inhibited from accessing software or hardware that may provide an unfair advantage. For example, if a student's basic math skills are being assessed and the intent is not to use a calculator, then keyboard functions or software used for computations must be blocked. For more information on this topic, refer to *Test Access: Guidelines for Computer-Administered Testing*. American Printing House for the Blind: Louisville, KY. Available from: <http://www.aph.org/tests/access/access.pdf>

Response Accommodations

Students with visual impairments who use the presentation accommodations discussed above may also need to use certain response accommodations so that answers can be recorded appropriately. As with presentation accommodations, response accommodations with which the student is familiar are recommended.

Considerations regarding response accommodations include the following:

- The student may present answers orally to a test proctor who completes the answer sheet.

- Students may record onto audio tape answers that then must be transferred to the answer sheet.
- The student may need to write answers in the test booklet or on separate paper. The student's answers will then need to be transferred to the answer sheet.
- Students may use word processors to write answers that will be transferred to the answer sheet. Depending on the construct being tested, test administrators must verify that students are inhibited from accessing software or hardware that may provide an unfair advantage. For example, if a student is responding to a writing prompt and the writing will be judged based on correct spelling and grammar, then the spell check function and grammar functions must be disabled.

Each of these accommodations requires a person to transfer the answers onto the scanable answer sheet or booklet that will be scored. If computer-based testing is used, the transfer of answers is not necessary as this process happens as part of the computer test program. The transfer of answers must be performed carefully to ensure that the student's answers are recorded as intended.

The following guidelines are provided to ensure that this transfer of information is performed appropriately:

1. Testing materials and the student responses are secure and confidential materials, and they must be treated as such to ensure test validity and the non-disclosure of the student's identity to unauthorized persons.
2. Response transcribers must know braille if transcribing braille responses.
3. Ideally, the response transcriber should be a "neutral" person, not someone with a vested interest in the student's scores.
4. Response transcribers must record the student's use of punctuation, spelling, and grammar structure, and provide the student's answer exactly as it was delivered by the student. The response transcriber cannot record speculative responses for items that the student failed to complete.
5. A second person should be made available to proofread the work of the response transcriber in order to ensure that the student's answers have been recorded accurately. For the same reason, two transcribers should work together in transferring to the answer sheet those graphics that the student has produced as an answer to a test item.
6. For a period of time, student responses must be maintained in a secure file with test name, copyright year, form and level administered so that the student's actual responses can be reviewed if questions arise.

Setting Accommodations

Frequently, students with visual impairments will need to take a test individually or in small groups to ensure that test accommodations are implemented without interference to the concentration and test taking of other students. If a student is being read to, is recording answers by using technology that is noisy, or is recording answers orally, then the student must take the test individually and under the supervision of a test administrator to prevent the distraction of other test takers.

The setting for the testing situation must allow space for the materials to be used by the student. The manipulation of braille, large print materials, braillewriters, talking calculators, and large print materials requires that the student be allowed access to a flat, fairly large work area. Moreover, proper lighting, while sometimes overlooked, is critical for many readers with visual impairments. Lighting that has been adjusted to suit the student's particular visual needs will help promote sustained reading efficiency.

Scheduling Accommodations

The use of extended time for test completion is a testing accommodation that has received considerable attention since state testing and accountability systems have been implemented. Research investigating the use of extended time has yielded no conclusive information about its benefit (Tindal & Fuchs, 1999). However, students with visual impairments will usually require extended time during testing because using braille, large print, and audio format require more time than does reading standard print with acceptable visual acuity.

A study by Gompel, van Bon, and Schreuder (2004) found that students with low vision can read effectively with their low vision aids, using 1 ½ to 2 times that needed by regular students. Traditionally, extended time for testing large print readers has been 1 ½ time, and for braille readers time allotted has been twice as much as that allowed for the standard print reader. Another study suggests that experienced braille readers may need no more than 50% additional time than the stated duration, with additional time allowed for the manipulation of an audio device or the marking of an answer sheet (Wetzel & Knowlton 2000).

Regardless of the time allowed, the student should be carefully monitored to ensure that time is being used appropriately. If students need an inordinate amount of time, educators may need to investigate the efficiency of the chosen reading mode or initiate remediation to improve speed. Generally,

timing accommodations should be individualized according to the test taker's reading rate and testing situation (Wetzel & Knowlton, 2000).

Reading braille or large print and listening to material presented orally, especially when accompanied by graphic material, can be a fatiguing and often frustrating experience in a high stakes testing environment. Therefore, students may need several brief sessions in which to take the test. Additional break options should also be considered.

Students may need to be tested at different times of the day depending on their optimal functioning time. Students may also need to be tested over a longer time period, a week rather than two days, for example. However, any alteration of the timetable will necessitate close supervision to ensure test security.

Special Tools Accommodations

There are a number of special tools that students with visual impairments may need during the testing process. Tools provided for sighted students during testing, such as calculators, rulers, protractors, or other measurement devices, must be provided for students with visual impairments, as well. Talking calculators, braille or large print rulers, protractors, and other measurement devices do exist, and the student should be allowed to use them. When testing allows the use of non-scientific or scientific calculators, students with visual impairments should be permitted to use an equivalent device that has been adapted for use by the visually impaired user, e.g., a non-scientific or scientific talking calculator. Should a state provide calculators for the sighted population taking the test, then talking calculators should be provided to students with visual impairments who are taking the test. Before they are used in a testing situation, electronic and battery-operated devices should be inspected to ensure they function properly and that the devices contain no saved information, which might provide the user an unfair advantage.

Some other special tools that students with visual impairments might use include:

Abacus: An abacus is often useful for students when mathematics problems are to be calculated without a calculator. The abacus functions as paper and pencil for some students with visual impairments.

Graphic Tools: If students are required to produce graphic information on a test, they should be allowed to use one of several graphic tool kits that exist. It is best if the student uses whatever method he or she has used during classroom instruction of graphic construction. The student's

constructed graph, if done in braille, will need to be transcribed into print for scoring.

Line Markers and Templates: Occasionally students may want to use manipulative devices, such as a ruler or template, to maintain placement on a line of braille or print.

Magnification Devices: Magnification devices include eyeglass-mounted magnifiers, free standing or handheld magnifiers, and electronic equipment such as the closed circuit television (CCTV) or a computer that has text enlargement software installed. These devices do not provide a student with an unfair advantage. Rather, they are devices that the student requires to access print, and they should be allowed as standard accommodations. Should a computer be used as an accommodation, the test administrator must ensure that only allowable computer options, such as screen enlargement, are used.

Scientific Tables: Frequently, students may need to refer to a braille or large print edition of a scientific table, such as the periodic table of elements.

Physical Manipulatives: Some testing situations may allow that objects presented on paper (i.e. money, geometric solids) can be substituted with a physical representation of the picture (i.e. penny, nickel, dime, quarter, or geometric solids used in instruction).

Special Paper: Students may need specially designed bold line or raised line paper for constructing answers and producing graphs.

Summary

This paper has outlined the typical accommodations used by students with visual impairments when being tested through use of a written assessment such as an academic achievement test. While this discussion is not exhaustive of all accommodations that might be used, it is intended to provide an understanding of the general accommodations that are expected when assessing a student with a visual impairment. Documentation of these accommodations on the IEP is crucial as is routine evaluation of their effectiveness.

References

Allman, C. et al. (2005). *Assessment Issues: An Accommodations Guide*. 19th Annual Josephine L. Taylor Leadership Institute: Boston, Massachusetts, March 11, 2005. Retrieved May 16, 2006 from the American Foundation for the Blind web site:
<http://www.afb.org/Section.asp?SectionID=58&TopicID=264&DocumentID=2762>

American Printing House for the Blind. (2003, September). *Distribution of eligible students for fiscal year 2003, based on the federal quota census of January 7, 2002*. (Annual Report, 2003) Louisville, KY: American Printing House for the Blind.

Gompel, M., van Bon, W. H. J., & Schreuder, R. (2004). Reading by children with low vision. *Journal of Visual Impairment & Blindness*, 98(2), 77-89.

Tindal, G. & Fuchs, L. (1999). A summary of research on test changes: An empirical basis for defining accommodations. Mid-South Regional Resource Center, Lexington, KY. Retrieved May 14, 2004, from the Mid-South Regional Resource Center Web site:
<http://www.ihdi.uky.edu/msrrc/PDF/Tindal&Fuchs.PDF>

Wetzel, R. & Knowlton, M. (2000). A comparison of print and braille reading rates on three reading tasks. *Journal of Visual Impairment & Blindness*, 94(3).

APPENDIX G

Educational Testing Service (ETS)

GUIDELINES FOR A TEST READER

The following guidelines will assist in providing the testing accommodation of a reader for a test taker with disabilities. If you have questions about a specific test, please contact a testing program representative.

Characteristics of a Good Reader

1. Ability to read aloud clearly, at a normal pace, and with good pronunciation.
2. Familiarity with the words, terms, symbols, or signs that are specific to the test content.
3. Ability to follow instructions to read, verbatim, only the words in the test book or on the screen, without changing or adding words or assisting the test taker in selecting a response.
4. Willingness to be patient and to understand that the test taker may need to have many test questions repeated several times.
5. Ability to work with the test taker comfortably and compatibly without creating unnecessary pressure or unrealistic expectations.

General Information for Readers

1. You must review the test format, subject matter, and sample test questions in the testing program's information bulletin or by visiting the testing program's Web site.
2. Prior to beginning the test, you will have the opportunity to meet with the test taker, who should be encouraged to discuss matters that will affect test performance, e.g., how to determine the amount of remaining time and how you can help pace the test taker through the test. The opportunity to discuss such questions and concerns before the test administration begins will make the test administration more effective and fair and will help to minimize misunderstandings and misinterpretations.
3. Test takers who are blind or who have low vision may also have special tools or equipment (e.g., abacus, braille, slate, and stylus) that have been approved for use during the test. These tools offer neither an unfair nor a special advantage; they are comparable to paper and pencil and accomplish the same task. The most important consideration is for you and the test taker to have the

same set of expectations about what is to happen, how much time is allowed, and how all the tasks will be accomplished.

4. Test takers who are blind or who have low vision may also have special tools or equipment (e.g., abacus, braille, slate, and stylus) that have been approved for use during the test. These tools offer neither an unfair nor a special advantage; they are comparable to paper and pencil and accomplish the same task. The most important consideration is for you and the test taker to have the same set of expectations about what is to happen, how much time is allowed, and how all the tasks will be accomplished.
5. The test taker may require all or portions of the test to be read aloud. The test taker depends on the reader to read the test questions accurately, to pronounce words correctly, and to speak in a clear voice throughout the test, which may go on for several hours. It is a demanding and somewhat tedious task, and not everyone is suited to do it. Drinking water should be available for you.
6. Your task is to read only the test questions. Do not try to solve problems or determine the correct answer as you read because this may result in an unconscious pause or change in inflection that could be misleading or disconcerting to the test taker. The expression on your face should remain neutral. Do not look at the test taker or smile or frown to indicate approval or disapproval.
7. Read each question as clearly as possible. Give special emphasis to words printed in boldface, italics, or capitals, and tell the test-taker that the words are printed that way. Do not give your own emphasis to words not emphasized in print.
8. If you find an unfamiliar word or one that you are not sure how to pronounce, advise the test taker of your uncertainty about the word and spell it.
9. When reading a word that is pronounced like another word with a different spelling, if there can be any doubt about which word is intended, spell the word after you have pronounced it. Spell any words requested by the test taker.
10. Avoid getting into conversation about the test questions, but try to respond to the test taker's questions by repeating the item, words, or instructions as needed.

11. When reading passages, be alert to all punctuation marks. Read the passage through once so that the test taker can grasp the content of the passage. Some test takers may ask for the passage to be read through a second time with punctuation marks indicated. When required or asked to read, with punctuation, specific lines within a passage, indicate all punctuation found within those lines.
12. When test questions refer to particular lines of a passage, reread the lines before reading the question and answer choices. For example, you might say, "Question X refers to the following lines..." Reading the lines referred to would then be followed by reading question X and its response options.

Special Considerations for Multiple-Choice Tests

1. Be particularly careful to give equal stress to each response option and to read all of them before waiting for a response. The test-taker will record the answer or provide the answer to the test administrator (writer), who will record it for the test taker.
2. If you are recording answers and if the test taker designates a response choice by letter only ("D", for example), ask if you should reread the complete response before the answer is recorded.
3. If the test taker chooses an answer before you have read all the answer choices, ask if you should read the other response options.
4. Allow the test taker to pause before responding. However, if the test taker pauses for a considerable time following your reading of the answer choices, say: "Do you want me to read the question again...or any part of it?" In rereading questions, be careful to avoid any special emphasis on words not emphasized in the printed copy by italics or capitals.

Mathematics Reading

A test taker is permitted to ask the reader to write notes and to assist with intermediate steps in computing mathematics problems, especially if the test taker has no tools or equipment for taking notes or is unable to do so. For example, in the multiplication of numbers (e.g., 17×521), a test taker may say, "Seven times one is seven. Put down the seven. Seven twos are fourteen. Put down the four to the left of the seven and carry the one." The test taker should be specific in directions to the reader as to what he or she writes, in which column to write it, what to carry, etc.

Mathematical expressions must be read precisely and with care to avoid misrepresentation for a test taker who has no visual reference. For math

items involving algebraic expressions or other mathematical notation, it may be preferable for the reader to silently read the entire question before reading it aloud to the test taker. Use technically correct yet simple terms, and be consistent in the treatment of similar expressions. Some typical expressions and the manner in which they should be read follow:

(a) *Lowercase letters that are juxtaposed should be read as a multiplication expression:*

e.g., xy should be read as "x y," unless it is part of a complex expression or this reading is otherwise unclear, in which case read it as "x times y."

(b) *Capital and lower-case letters should be differentiated because they can have different meanings in mathematical or scientific expressions:*

e.g.,

$$R - 2y = 6$$

should be read as "Capital R minus two y equals six."

(c) *Simple numerical fractions should be read as fractions:*

e.g.,

$$5/6$$

Should be read as "five sixths."

(d) *However, similar letter expressions can be read as one letter "over" another:*

e.g.,

$$\frac{a}{\frac{b+d}{c}}$$

Should be read as "a over b."

Should be read as "a fraction with numerator b plus d and denominator c."

If there is any question as to where the fraction ends, say "end fraction."

(e) *Negative numbers should be read as "negative":*

e.g.,

-5

should be read as "negative five," not "minus five."

When a subtraction operation is involved, read the sign as "minus,"

e.g. :

$x - 5$

should be read as "x minus five."

(f) *Expressions containing multiple mathematical operations should be read exactly as they appear. Expressions containing parentheses or brackets can be read in any of the following three ways:*

1. quantity, close quantity
2. paren, close paren (or bracket, close bracket)
3. left paren, right paren (or left bracket, right bracket)

For "paren, close paren" or "left paren, right paren," it is also acceptable to use "parenthesis" instead of "paren."

If you use the term "quantity," in complicated expressions, announce where enclosed portions end by saying "end quantity:"

e.g.,

$(2x - 6y) - 10$

could be read

- As "The quantity two x minus six y, close quantity, minus ten;"
- As "paren, two x minus six y, close paren, minus ten;"
- Or as "left paren, two x minus six y, right paren, minus ten."

$a(x - y)$

could be read as "a, parenthesis, minus y, close parenthesis."

$a \times b^2$

could be read as "a times the square of b."

Use pauses to audibly group sections of an expression together:

e.g.,

$$z + (-a)$$

could be read as "z plus [PAUSE] paren negative a close paren."

(g) *If equations are used in the test you will be reading:*

Since equations are a shorthand means of stating relationships between quantities, the reader's job is to translate this shorthand back into everyday English. Read equations in this order:

1. If the equation is numbered, read its number first.
2. Give the meaning of each letter or symbol
3. Read the equation.

e.g.:

Eq. 6-2

E = energy in ergs

m = mass in grams

c = speed of light in cm./sec.

$E = mc^2$

Read as "Equation six dash two. Capital E equals energy in ergs, m equals mass in grams, and c equals the speed of light in centimeters per second. Then, Capital E equals m c squared."

Test Center Procedures for Using a Reader

1. An approved reader should be admitted to the test center with the test taker. The reader's photo-bearing identification should be checked.
2. Prior to the start of the exam, the test center administrator/supervisor will review the Guidelines with the test taker and the reader and will set the ground rules for the conduct of the examination.
3. The test administrator must remain in attendance at all times during the test administration.
4. An approved reader is *not* present to function as an aide to the test center staff. It is inappropriate to ask the reader to perform clerical duties of any kind. The reader should not be asked to

assume any responsibilities belonging to either the center staff or the test taker.

5. Test center staff must ensure that proper test security is maintained at all times. It is important that the test administrator ask questions and avoid any hasty interpretations of what may be communication of test content or exchange of information between the test taker and the reader that might give the test-taker an unfair advantage. The task requested by the test taker might be acceptable once understood. Discussion or communication concerning interpretation of test content is not permitted. If such discussion occurs and cannot be controlled, or if test center staff observe anything they deem unusual, the situation should be reported on the Supervisor's Irregularity Report (SIR) or the Electronic Irregularity Report (EIR) and the test taker advised of this action.
6. The test center administrator may also stop the test and dismiss the test taker if he or she believes that the reader has provided the test taker with any unfair advantage. In such instances, ETS reserves the right to cancel the test taker's score.

References

Educational Testing Service. (2003). *ETS Guidelines for a Test Reader*.

Retrieved August 1, 2008, from

<http://www.ets.org/portal/site/ets/menuitem.c988ba0e5dd572bada20bc47c3921509/?vgnextoid=7889bc914be45010VgnVCM10000022f95190RCRD&vgnnextchannel=d7f7be3a864f4010VgnVCM10000022f95190RCRD>

ETS materials selected from *ETS Guidelines for a Test Reader*, 2003.

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Notes:

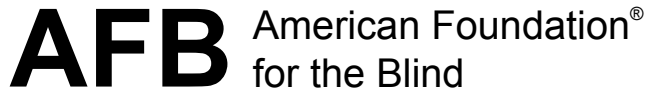
Notes:



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Exhibit D



Expanding possibilities for people with
vision loss

Building Assessment Initiatives for Schools: Guidelines to Support the Contract Development Process Between Test Publishers and States

Braille Downloads

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Introduction

Contracts and Requests for Proposals (RFPs) negotiated between state assessment agencies and test publishers carefully outline the responsibilities and expectations for the state assessment development and implementation process. While these documents have specific points for consideration, often language does not include the assurance of accessible test development and implementation. Accessible test items enable all students to participate in the assessment process in a way that allows abilities rather than disabilities to be assessed. Accessible formats of tests, including the practice tests, must be available for students with visual impairments at the same time as their sighted peers. The checklists provided below outline considerations for inclusion in each state's RFP or test contract. The usual contractual language found in state contracts should be employed, with these special considerations added.

Universal Design Principles

JA3235

The following guidelines are general considerations for contract and RFP development that ensure test development and use for all students, including those with disabilities:

The same assessment system is used to measure the achievement of all public school students in the state. Groups to be included in the state assessment need to be clearly defined.

The student assessment system provides coherent information on attainment of state standards across grades and subjects.

The tests are designed to be valid and accessible for all students. This includes students with disabilities and students with limited English proficiency.

The tests are aligned with the state's challenging academic content and student achievement standards.

The tests are valid, reliable, technically sound, and consistent with nationally recognized professional and technical standards such as national test publisher standards and guidelines of the American Psychological Association (APA) and American Educational Research Association (AERA).

The reporting system allows results to be disaggregated (according to the No Child Left Behind Act (NCLB) and Individuals with Disabilities Improvement Act of 2004 (IDEA) guidelines) within each state and local education agency and school by gender, racial and ethnic group, migrant status, disability, socioeconomic status, and limited English proficiency.

The tests involve multiple up-to-date measures of student academic achievement, including measures that assess higher-order thinking skills and understanding.

The reporting system allows production of individual student reports.

Roeber, E. (2003). Assessment models for No Child Left Behind.

Education Commission of the States. <http://www.ecs.org/html/Document.asp?chouseid=4009>

Item Development and Review Process with Publisher

The following guidelines are provided for consideration as language to include in contracts and RFPs that ensure the development and implementation of accessible test formats, specifically for students with visual impairments.

Test publishers must maintain access to experts, i.e. individuals who know and have either taught or are knowledgeable about braille, tactile graphics, large print, and audio. These individuals can provide information during each phase of test development.

Experts in visual impairment must be included on Item Writing Committees and Bias Review Committees.

The use of accommodations must be considered during test item development to ensure appropriateness to test purpose and test access.

The test item pool must be large enough for Bias and Item Review Committees to replace items determined to be inaccessible when presented in braille, large print, audio formats, or as tactile graphics.

A representative sample of students with visual impairments needs to be included in any field-testing of the assessments, as prescribed in Standard 10.3 (p. 106) of the Standards for Educational and Psychological Testing (1999).

An adequate amount of time for tests and practice tests to proceed through a subcontractor's processes needs to be built into contracts so that accessible media as required by each student's Individualized Education Program (IEP) are delivered at the same time as the original test materials.

All test administrators' manuals, supplemental manuals which accompany the accessible media versions of tests, and local test administrators'/proctors' instructions and training manuals must be provided in accessible formats for visually impaired staff. These accessible materials must be requested far enough in advance to allow for delivery at the same time as the original test materials.

At the end of each testing season, both students and teachers should give input regarding the testing experience.

Item analyses for accessible format test items will be carried out at the end of each school year (or testing season) as part of a continuous improvement plan.

Allman, C.B. (2004). Test Access: Making tests accessible for students with visual impairments: A guide for test publishers, test developers, and state assessment personnel. Second Edition. Louisville, KY: American Printing House for the Blind.

<http://www.aph.org/tests/access2/index.html>

Accessible Media Development with Subcontractors

This section provides guidelines for consideration when contracts are developed with subcontractors such as agencies or individuals who will provide tests in one or more accessible formats (braille, tactile graphics, large print, and audio). The process may include steps for editing, transcribing, designing tactile graphics, proofing, producing and quality checking the accessible media. It is essential that the timeline allow adequate time for each of these steps. Additional time may need to be built into contracts depending on specific requirements of the state such as an independent proofreading by another person or agency, or aligning various media for multimedia presentations.

The subcontractor must agree to work closely with the test publisher, the state department of education, and the test editor.

The construct to be measured must be documented by the test publisher in test item specifications and made available to test editors and accessible media producers.

Proofreading by a qualified individual, i.e. a person who knows the needed codes and formats and is experienced or certified (if applicable), in braille, tactile graphics, large print, and audio versions of the test must occur before multiple copies are made. High-stakes tests should be proofed a minimum of two times.

Accessible versions of the test must be aligned so that a multimedia presentation (as approved by state assessment programs) is possible if specified by a student's IEP.

Allowable test format changes, accommodations, and general assistance to test takers by the test administrator or proctor must be stated in the test administration manual or supplemental materials produced by the subcontractor.

Subcontractors must be able to meet their deadlines so that high quality accessible media are delivered to school systems at the same time as the original test materials.

Test security and confidentiality standards must be upheld by testing subcontractors.

Allman, C.B. (2004). Test Access: Making tests accessible for students with visual impairments: A guide for test publishers, test developers, and state assessment personnel. Second Edition. Louisville, KY: American Printing House for the Blind.

<http://www.aph.org/tests/access2/index.html>

Resources

Assessment Models for No Child Left Behind,
from Education Commission of the States (ECS)
<http://www.ecs.org/clearinghouse/40/09/4009.doc>

Building Tests to Support Instruction And Accountability: A Guide for Policymakers,
from National Education Association (NEA) <http://www.nea.org/accountability/buildingtests.html>

Designing School Accountability Systems,
from Council of Chief State School Officers (CCSSO)
http://www.nciea.org/publications/desigSchAccSyst_Gong02.pdf

Illustrative Language for an RFP to Build Tests to Support Instruction and Accountability,

from American Association of School Administrators (AASA)
[http://www.aasa.org/issues_and_insights/assessment/Illustrative Language for an RFP.pdf](http://www.aasa.org/issues_and_insights/assessment/Illustrative_Language_for_an_RFP.pdf)

Information on Writing a Request for Proposal (RFP)
<http://www.arches.uga.edu/~ninaaug/ITclasses/7550/>

Model Contractor Standards and State Responsibilities for State Testing Programs,
from Education Leader's Council (ELC) <http://www.accountabilityworks.org/publications>

National Federation of the Blind (NFB/New Hampshire Resolution on Accountability)
<http://www.education-rights.org/brailletwomey11399.html>

Tennessee RFP for Development of Online Tests
<http://www.state.tn.us/finance/rds/ocr/rfp/rfp33104001.pdf>

Test Access: Making Tests Accessible for Students with Visual Impairments:
A Guide for Test Publishers, Test Developers, and State Assessment Personnel. Second Edition.
American Printing House for the Blind. <http://www.aph.org/tests/access2/index.html>

The Standards for Educational and Psychological Testing (1999),
American Psychological Association <http://www.apa.org/science/standards.html>

Thompson, S., & Thurlow, M. (2002). Universally designed assessments: Better tests for
everyone! (Policy Directions No.14).
Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.
Retrieved 1-28-05 from the World Wide Web:
<http://education.umn.edu/NCEO/OnlinePubs/Policy14.htm>

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EXHIBIT 52



**SOCIETY for
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(APA) and Organization for Psychological Science

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OCR Issues Draft Guide on Disparate Impact in Educational Testing

Wayne Camara
The College Board

In May, the Department of Education's Office of Civil Rights (OCR) released a draft Resource Discrimination in High Stakes Testing" that sought to provide an overview of federal standards principles that should guide the use of tests for making high stakes educational decisions (e.g. special educational referrals, promotion, graduation, and scholarship awards). This Resource development for several years according to OCR, but educational groups and test publishers working days before it was originally scheduled for release.

The Guide may have limited direct impact on I-O psychologists, unless they are involved in education. However, the Guide may be of interest for other reasons, since it interprets and applies both employment arena and professional testing standards to issues of disparate impact in ways that "overreaching" or incorrect.

Test publishers, APA, and other educational institutions objected to the proposed timing of the agreed to revise the current document with plans for a fall publication. OCR has stated the G new federal guidelines or professional standards, but rather will provide a meaningful interpretation of tests in education. A number of national media outlets (*New York Times*, *Wall Street Journal*, *Chronicle of Higher Education*) have run stories on the guidelines and op-ed pieces that have emphasis on disparate impact being the sole determination of whether or not a test should be used.

The Guide cites specific wording from the *Standards for Educational and Psychological Testing*. 40 occasions, leading APA, AERA, and NCME to formally request that OCR delay revision of the Guide. The Guide has been revised and published (sometime around December 1999). Several organizations have comments on the OCR Guide.

The Guide attempts to apply Title VII law, EEOC Guidelines, and professional standards that apply to educational test use. It cites several Supreme Court and lower courts decisions concerning employment or transportation decisions and standards to education. Major concerns addressed by educational groups are summarized in comments submitted by the College Board (Camara, 6/21/1999):

First, the Resource Guide focuses exclusively on disparate impact resulting from tests (or differences) and ignores the level of validity and utility offered by a test. Disparate impact cannot be considered in isolation; it must be evaluated in terms of the overall validity and utility of inferences associated with the test. The Resource Guide clearly elevates any measure, irrespective of validity, cost, or burden to the test, if it results in lower disparate outcomes above any test having greater disparate outcomes. We believe this is a bad precedent that has no legal or professional justification and the Guide will have a chilling effect on the development of educational tests.

Second, the Resource Guide offers no guidance on what level of disparate impact would result in a finding of discrimination. There should be substantial statistical disparities or would any disparate outcome result in an investigation?

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should not be the primary statistical analysis used to determine, and when an alternative measure is used, it should be clearly identified and justified. A consistent pattern of ethnic and racial disparities has been found across a variety of standardized tests, including the National Assessment of Educational Progress (NAEP) and the National Educational Longitudinal Study. Disparities in test results reflect similar differences in educational measures used for high-stakes decisions, such as high school grades, class rank, college admissions, and job performance, college achievement, and grades) and may be indicative of earlier differences in learning and educational opportunities, not test bias or flaws with the test.

Third, professional and technical standards do not define tests so narrowly that they exclude assessments that are both used daily to make high-stakes decisions about individual students and have similar levels of disparate impact against protected groups. Specifically, the Test Standards include standardized ability (aptitude and achievement) instruments, diagnostic and evaluative devices, personality inventories, and projective instruments. A more appropriate choice among assessment tools will be facilitated if there is a reasonable comparability in the kinds of information available. The three broad categories of test instruments **are covered** [emphasis added]: constructed performance tests and to a lesser extent, structured behavioral samples (pages, 3_4)." Related to this comment, the Resource Guide be renamed to put added emphasis on Measures Used in Making High-Stakes Decisions (*Uniform Guidelines and Employment Selection Procedures*), rather than focus exclusively on the decision-making process, testing.

Fourth, we applaud OCR's deference to the Test Standards. However, the Resource Guide in its current form, professional standards can be applied in a rigid manner in evaluating tests. The Test Standards are a rigid checklist approach, noting that specific circumstances affect the relevance of standards. Standards must be applied in evaluating tests. Professional practice and standards are typically constructed to reflect that other measures need not meet all standards to be appropriately used within the bounds of professional practice (Richardson, 729 F. Supp. At 821, 823). In addition, the three sponsoring educational associations have endorsed the Standards, which date back to 1985. We strongly endorse the recommendations from AP that the issuance of this Resource Guide be deferred until after publication and dissemination of the Standards and requesting a standard 90-day review period for any subsequent drafts of this Resource Guide prior to publication of the revised Test Standards.

Fifth, we would ask OCR to ensure that colleges and universities, school districts, and state education agencies have an opportunity to review and comment on this proposed Resource Guide. The Resource Guide should be disseminated or reviewed by colleges and secondary schools. These are the very organizations most affected by the Resource Guide once it is issued and it seems appropriate that they be given an opportunity to comment on the inferences and proposed standards.

Sixth, the distinction the Resource Guide makes between tests and other assessment devices is problematic in establishing a much lower technical, professional, and legal standard for more subjective assessment devices (such as applications, grades and GPA, recommendations, ratings or evaluations of student work and experiences and honors, community service and involvement, samples of student work). In *Watson v. Fort Worth Bank and Trust*, 487 U.S. 977, the American Psychological Association submitted an amicus curiae brief arguing that there is no professional or scientific justification to treat subjective and objective devices differently. In fact, not imposing essentially the same legal and technical standards for tests and devices used in high-stakes individual decisions would provide a sanctioned and covert route for discrimination. APA further argued that subjective procedures (in that case used for employment) are "amenable to psychometric scrutiny" as objective procedures, citing the Test Standards which address internal validity (Camara, 1996). In deciding *Watson v. Fort Worth Bank and Trust*, 487 U.S. 977, all eight of the Justices agreed with O'Connor's opinion holding that the adverse impact theory can be used in cases involving subjective criteria. O'Connor was concerned that an employer could combine an objective criteria (such as a test or diploma) with subjective criteria (such as interviews or ratings) and easily insulate itself from the Griggs test. O'Connor noted that making systems could have "precisely the same effects as a system pervaded by impermissible discrimination" (Opinion at 4926).

Seventh, professional and legal standards do not provide any support for OCR's distinctions between tests and other measures. We agree with comments to an earlier draft of this Resource Guide submitted by the American Psychological Association and the American Educational Research Association in *Testing and Assessment* (Shavelson, June 10, 1996), stating that "OCR's inquiry is not to preclude the use of tests, but to ensure the validity of inferences and decisions based on tests, but rather to determine whether the entire testing process provides students a fair and equal opportunity to learn...." The Resource Guide ignores the fact that tests are only one part of the assessment process and even if they contribute more to disparate outcomes. In fact, high school courses, judgments a

High school curriculum, grades, and rank may also contribute more to disparate outcomes, if testing, if an institution places substantially greater weight on these factors. For example, if one of several factors in admissions, then there is no guarantee those disparate outcomes will be eliminated. In requiring tests to meet an exceptionally higher standard than other measures (e.g., student work, high school rank, past experience, and opportunities), the Resource Guide will require the use of valid and objective standardized tests used by educational institutions, states, and school districts. Educational institutions may opt to employ less valid and less objective methods for high-stakes testing, but these methods are not addressed in this Resource Guide.

Eighth, the Resource Guide also sanctions the use of the *Uniform Guidelines on Employment Selection Procedures* resource in educational testing. As the Resource Guide acknowledges in a footnote, there are differences between educational and employment testing that we believe undermines any attempt to apply the *Uniform Guidelines* in educational settings. The *Uniform Guidelines* were never developed with application to educational testing. Organizations did not have an opportunity to comment on extensions of the principles to educational testing. The *Guidelines* are over 25 years old and do not reflect current scientific principles of measurement and test practice. The *Uniform Guidelines* are outdated and do not conform to the Testing Standards (e.g., their consideration of validity (as accomplished by adopting one of three distinct types of validity: content, construct, and criterion) (this is virtually ignored in the *Guidelines*, but is accepted professional practice), differential item functioning, as well as several other areas (APA, 1985). The *Uniform Guidelines* may provide a framework for developing guidelines addressing test use, but they should not be viewed as a substantive resource in educational testing.

Ninth, statistical analyses should be based on the pool of qualified applicants, not a general population. This issue is not addressed in the Resource Guide.

Tenth, this Resource Guide implies that once disparate impact is established that the burden shifts to the educational institution to demonstrate both the educational necessity of the test and then to demonstrate that no alternative exists throughout the process. This legal interpretation is incorrect.

Other sections of the Resource Guide viewed as problematic include wording implying that separate studies are required for each school; that tests can only be used for purposes they were originally designed for (e.g., for uses where sufficient validation evidence exist); and that there is a unique methodology for each test when they are to be used as the sole criteria.

On June 18th, the House held a hearing on the OCR Guide and department officials noted that they would recirculate the current draft to groups who have already submitted comments on the current draft and submit a revised Guide to the National Academy of Sciences Board of Testing and Assessment. Thereafter, they anticipate making a final draft available for public review this fall. They will post the draft and will have the revised Guide posted on their web (Coleman, June 21, 1999, personal communication).

References:

American Educational Research Association, American Psychological Association, and National Academy of Education (1985). *Standards for educational and psychological testing*. Washington, DC: American Educational Research Association.

American Psychological Association (1985). *Report of the Ad Hoc Committee to Develop a Uniform Guidelines on Employee Selection Procedures*. Washington, DC: Author.

American Psychological Association (1987). *Amicus curiae brief in support of the petitioner. In Watson v. Fort Worth Bank and Trust*. Washington, DC: Author.

Camara, W. (1996). Fairness and public policy in employment testing: Influences from a professional perspective. In W. Barrett (Ed.), *Fair employment strategies in human resource management*. Westport, CT: Quorum Books.

Camara, W. and Schmidt, A. (Under Review). Social stratification and group differences in standardized test scores and educational indicators.

Shavelson, R. (June 10, 1996). *Correspondence to Norma Cantu*.

Watson v. Fort Worth Bank and Trust, 487 U.S. 977 (U.S. Supreme Court, June 29, 1988).

EXHIBIT 65

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- Contact the standards organization that developed and published the material.

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- [USA.gov](#)
- [United States Government Manual](#)
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The legal effect of incorporation by reference is that the material is treated as if it were published in the *Federal Register* and CFR. This material, like any other properly issued rule, has the force and effect of law. Congress authorized incorporation by reference in the Freedom of Information Act to reduce the volume of material published in the *Federal Register* and CFR. (See 5 U.S.C. 552(a) and 1 CFR part 51). Congress gave complete authority to the Director of the Federal Register to determine whether a proposed incorporation by reference serves the public interest.

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Where to Find Materials Incorporated by Reference at NARA Facilities

In most cases, materials incorporated by reference are made available through the standards organization that developed the standard. Contact the standards organization or other designated sources through the address listed in the *Federal Register* or CFR.

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UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

AMERICAN EDUCATIONAL RESEARCH)	
ASSOCIATION, INC., AMERICAN)	
PSYCHOLOGICAL ASSOCIATION, INC.,)	
and NATIONAL COUNCIL ON	)	Civil Action No. 1:14-cv-00857-TSC-DAR
MEASUREMENT IN EDUCATION, INC.,)	
)	
Plaintiffs/Counterclaim-Defendants,	)	PLAINTIFFS' REPLY IN FURTHER
	)	SUPPORT OF ITS MOTION FOR
v.	)	SUMMARY JUDGMENT AND
	)	PERMANENT INJUNCTION AND
	)	OPPOSITION TO DEFENDANT'S
PUBLIC.RESOURCE.ORG, INC.,)	MOTION FOR SUMMARY
)	JUDGMENT
)	
Defendant/Counterclaim-Plaintiff.)	
)	

Respectfully submitted,

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Counsel for Plaintiffs American Educational
Research Association, Inc., American
Psychological Association, Inc., and
National Council on Measurement in
Education, Inc.

Resource posted online and what those individuals have done with such copies (Dft. SDF at ¶¶ 89-90 [Dkt. 68-3]; Plfs. SDF at ¶ 51). Additionally, because Public Resource's dissemination of the 1999 Standards does not provide notice that they have been replaced by the 2014 Standards, Plaintiffs expect a loss of revenue from sales of authorized copies of the 2014 Standards, and harm to the public due to the sale of outdated standards (Dft. SDF at ¶ 99 [Dkt. 68-3]; Plfs. SDF at ¶ 51; Geisinger Decl. ¶¶ 25-29). Additionally, Plaintiffs presented evidence and case law concerning the irreparable injury that results from Plaintiffs losing the ability to prevent the unwanted use and rampant dissemination of their work—a consideration that is particularly apt where, as here, a defendant places works online for copying and redistribution by numerous third parties. (Plfs. Mtn. at 53-54 [Dkt. 60-1].) Public Resource did not rebut this evidence.

Despite Public Resource's uncorroborated statements to the contrary, Plaintiffs continue to actively sell the 1999 Standards. (Plfs. SDF at ¶¶ 40-41; Levine Decl., ¶ 20, Exh. QQQ). Public Resource's allegation that Plaintiffs do not seek any business opportunities with respect to the 1999 Standards is wholly unsupported (*See* Dft. Mtn. at 56). Sales revenue from prior versions of Plaintiffs' standards are vital to Plaintiffs' financing of future updates (Plfs. SDF at ¶¶ 51, 66). A loss of revenue from selling the 1999 Standards would result in a lack of funding for future revisions of the 2014 Standards and beyond (Plfs. SDF at ¶ 51).

The consideration of widespread future infringement is particularly pressing in situations, like this one, involving digital distribution of a plaintiff's work that can start a potential chain-reaction of infringement. "When digital works are distributed via the Internet, every downloader who receives one of the copyrighted works is in turn capable of also [re]transmitting perfect copies of the work[.]. Accordingly, the process is potentially exponential rather than linear, threatening virtually unstoppable infringement of the copyright." *Metro-Goldwyn-Mayer Studios*,

EXHIBIT 83

Report of the Advisory Commission on Accessible Instructional Materials in Postsecondary Education for Students with Disabilities

December 6, 2011

barriers to accessing instructional material in nonspecialized formats, including an individual described in section 121(d)(2) of title 17, United States Code [i.e., the Chafee Amendment].²⁶

Another copyright exception that is relevant to the AIM discussion is Section 107, commonly known as “Fair Use.”²⁷ This doctrine is explained in greater detail in Chapter 1.

I know the mandate for the Commission was to look principally at print material, but the definition of textbook has changed. If you don't look at multimedia, you will be doing all of us a terrible disservice.

**Postsecondary ADA Coordinator
(2011, July 12)**

Additionally, the triennial rule-making provisions of section 1201 of the Copyright Act may be relevant.²⁸ Section 1201 was enacted in 1998 as one part of a copyright amendment known as the Digital Millennium Copyright Act (DMCA).²⁹ It allows the Librarian of Congress, upon the recommendation of the Register of Copyrights, to exempt certain classes of works from the prohibition against circumvention of technological measures that control access to copyrighted works, when that circumvention is undertaken for certain non-infringing uses (e.g., to enable certain e-text controls).³⁰ This process and some of the exemptions of recent rule-makings are summarized in Chapter 1 of this report and in more detail in Appendix D. (A new rule-making period under section 1201 is currently under way; public comments are due December 1, 2011.³¹

The Benefits and Challenges of Technology

The provision of AIM—most commonly in the form of digital text, refreshable braille generated from a digital text, embossed (paper) braille, tactile graphics, audio, or large print—and of access to content in general, is also significantly challenged by the emerging importance of digital technologies. In addition, online course registration, delivery and assessment; online databases, course chat rooms and message systems; open educational resources and web pages created by faculty; media-rich “textbooks” embedded in popular course management systems; computer-based exams used for entrance to or in order to complete a course, a major, or a certificate program all involve digital technologies. This complex, evolving and promise-filled landscape presents an opportunity for postsecondary institutions to implement educational practices that meet the needs of students who aspire to higher learning and improve access for students with disabilities. However, the presence of inaccessible technology-based products and services within the postsecondary environment can create unintended and nearly impenetrable barriers, while the availability of products and services that can be accessed by all students, including those with disabilities, can open new doors.

As technology continues to change the instructional materials landscape and increases the variety of available course materials, digital media has become more commonplace. The

Defendant.

JA3256

(D.C. Cir. 2001) (quoting *Daubert*, 509 U.S. at 592). Trial courts “act as gatekeepers who may only admit expert testimony if it is both relevant and reliable,” *Heller v. D.C.*, 952 F. Supp. 2d 133, 139 (D.D.C. 2013), though this role is “significantly diminished” at the summary judgment stage, see *Window Specialists, Inc. v. Forney Enters., Inc.*, 47 F. Supp. 3d 53, 60 (D.D.C. 2014).

In determining whether to strike an expert report, the court’s focus is therefore whether the expert’s assumptions “amount to ‘rampant speculation’ and should be excluded” or “merely represent a weak factual basis for his testimony” which could be appropriately challenged on cross examination at trial. *Boyar v. Korean Air Lines Co., Ltd.*, 954 F. Supp. 4, 7 (D.D.C. 1996). As the Court in *Daubert* instructed, “[v]igorous cross examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” 509 U.S. at 596.

Defendant argues that Dr. Geisinger is not qualified to opine on the economic impact of copyright infringement on standards developing organizations. Dr. Geisinger has almost four decades of experience as a professor and dean or chair of numerous university departments, has served on the boards of numerous testing and accreditation organizations, including Plaintiffs AERA and APA, and has served in editorial capacities for numerous testing and educational publications. While Defendant points out that Dr. Geisinger is not specifically trained in economics, the court finds that his extensive experience studying, working for, and chairing organizations similar to Plaintiffs’ qualifies him to opine on how copyright infringement may impact Plaintiffs’ revenue and how organizations like Plaintiffs’ may be impacted by changes in revenue.

Defendant additionally argues that Dr. Geisinger failed to sufficiently consider certain explanations for the decline in revenue, compared data from different years incorrectly, and

failed to adequately support his conclusions regarding the impact of potential lost sales on Plaintiffs' revenues and business model. However, Defendant could have retained its own rebuttal expert to perform their preferred economic analyses, but chose not to do so. The court will not strike an expert report simply because the expert did not rely on the particular assumptions or data Defendant thought was necessary. Such alleged deficiencies are more properly worked out and probed in "vigorous cross-examination [and] presentation of contrary evidence." *Daubert*, 509 U.S. at 596.

Finally, Defendant points to several statements in the Geisinger Declaration that it claims were not included in the initial expert report and must be stricken for lack of notice. However, the court notes that the contents of the Declaration are simply extensions or reaffirmations of Dr. Geisinger's expert report, and Defendant had an opportunity to probe the opinions and conclusions contained in the report at Dr. Geisinger's deposition. There does not appear to be any unfair surprise or lack of notice here.

The court finds that Plaintiffs have sufficiently established that Dr. Geisinger has the experience necessary to be offered as an expert in this case, and the content of his testimony—applying his personal knowledge and experience to the effects of copyright infringement of Plaintiffs' 1999 Standards—may "help the trier of fact." *See* Fed. R. Evid. 702; *Daubert*, 509 U.S. at 588. The court therefore denies Defendant's motion to strike the Geisinger Declaration.

Date: September 21, 2016

Tanya S. Chutkan
TANYA S. CHUTKAN
United States District Judge

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

AMERICAN SOCIETY FOR	.	
TESTING AND MATERIALS,	.	
et al.,	.	CA No. 13-1215 (TSC)
	.	
Plaintiffs,	.	
	.	
v.	.	
	.	
PUBLIC.RESOURCE.ORG, INC.,	.	
	.	
Defendant.	.	
.	
AMERICAN EDUCATIONAL	.	CA No. 14-0857 (TSC)
RESEARCH ASSOCIATION, INC.,	.	
et al.,	.	
	.	
Plaintiffs,	.	
	.	
v.	.	
	.	
PUBLIC.RESOURCE.ORG, INC.,	.	Washington, D.C.
	.	Monday, September 12, 2016
Defendant.	.	9:12 a.m.
.	

TRANSCRIPT OF MOTIONS HEARING
BEFORE THE HONORABLE TANYA S. CHUTKAN
UNITED STATES DISTRICT JUDGE

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P R O C E E D I N G S

THE DEPUTY CLERK: Your Honor, this is civil case 13-1215, American Society for Testing and Materials, et al., versus Public.Resource.org, Incorporated; and civil case 14-857, American Educational Research Association, Inc., et al., versus Public.Resource.org, Incorporated.

Counsel, please come forward and state your appearance for the record.

MR. FEE: Good morning, Your Honor. Kevin Fee on behalf of ASTM International. I'm joined at counsel table by Jordana Rubel, and we also have general counsel of ASTM in the back, Mr. Tom O'Brien.

THE COURT: Good morning.

MR. KLAUS: Good morning, Your Honor. I'm Kelly Klaus from Munger, Tolles & Olson representing the National Fire Protection Association. I'm joined at counsel table by my colleague, Rose Ehler. Our general counsel, Sally Everett, is also in the audience this morning.

THE COURT: Good morning.

MR. WETZEL: Good morning, Your Honor. Joe Wetzel from King & Spalding on behalf of ASHRAE, and I'm joined by Blake Cunningham from my firm at counsel table.

THE COURT: Good morning. And, counsel, I'm going to ask you, when you come up to argue, for you to restate your name, just because there's so many of you, for my court

1 reporter.

2 MR. HUDIS: Good morning, Your Honor. Jonathan Hudis
3 for the plaintiffs in the 14-857 case. With me is Nikia Gray,
4 and sitting in the audience is immediate past general counsel,
5 Nathalie Gilfoyle, and current general counsel, Deanna Ottaviano.

6 THE COURT: Good morning.

7 MS. MCSHERRY: Good morning, Your Honor.
8 Corynne McSherry for Public.Resource.org, and with me at the
9 counsel table is Andrew Bridges, my co-counsel who will also be
10 arguing part of the case, the bulk of the issues, to be honest.
11 He took that all on. Also with me at counsel table is Matt
12 Becker of Fenwick & West; Mitch Stoltz, with me from the
13 Electronic Frontier Foundation; and David Halperin.

14 THE COURT: Good morning, everyone. I know that the
15 parties had wanted more time; and I've given them less time than
16 they wanted, but I'm confident, having been through the
17 materials, that we can accomplish everything we need to
18 accomplish today.

19 I'm just going to ask that you be mindful of probably one
20 of the more important people in this room, which is my court
21 reporter, Mr. Wayne, who has to get all this down. So I'm going
22 to ask you, again, announce yourselves when you come up to the
23 podium and to speak clearly and not too quickly, something I
24 have to remind myself of as well.

25 MR. HUDIS: Your Honor, in light of the reduced time,

1 we gave your clerk our proposal for scheduled arguments.

2 THE COURT: I saw that. That's fine.

3 All right. So let's get right on it. I have some
4 questions, obviously, but I will raise them when it seems
5 appropriate as you're in your argument. So it looks like we're
6 going to deal with copyright issues. ASTM is going first.

7 Is that you, Mr. Klaus.

8 MR. KLAUS: Yes. Kelly Klaus representing NFPA
9 and speaking on behalf of all the plaintiffs in the ASTM case
10 on the copyright issues other than ownership, Your Honor, and
11 being mindful of time, I'll keep my own clock out and try to
12 watch.

13 THE COURT: All right.

14 MR. KLAUS: I told Mr. Hudis that I would try to
15 roughly hew to his schedule. I also told him that if I happen
16 to go over by a few minutes, we're happy to take time off of
17 other things on the back end.

18 THE COURT: All right.

19 MR. KLAUS: But we'll try to keep it there.

20 Your Honor, as you noted, you have a mountain of paper
21 that's been presented to you, and we appreciate the Court's
22 patience in reviewing all of it notwithstanding the numerous
23 materials that are here.

24 This is, we think, a very straightforward case of copyright
25 infringement. There are numerous works that have certificates

1 of registration that come with the presumption of ownership and
2 validity, and we have a defendant who is engaged in wholesale,
3 100 percent, verbatim exercise of multiple of the exclusive
4 rights of copyright. It has engaged in unrestricted, and until
5 he voluntarily stopped, pending resolution of these issues
6 before Your Honor, unrestricted distribution of these works.

7 I'd like to cover -- there are numerous copyright issues
8 other than ownership in the case, and numerous cases. I'd like
9 to cover three broad areas, and I'm happy, Your Honor, to
10 address, of course, all the questions that you have on these.

11 But the three areas, first, are that we think this is a
12 clear case where Congress -- this is a case of congressional
13 intent, ultimately, and this is a case where we think Congress
14 has spoken and that the Copyright Act makes clear that the works
15 in question are copyrighted and do not lose their copyright
16 protection simply because they are incorporated by reference.

17 The second is, I'd like to address the split in the case
18 law which is at the center of the dispute, really, between the
19 Veeck case from the Fifth Circuit --

20 THE COURT: And I'm sorry. Just for Mr. Wayne's
21 purposes, Veeck is spelled V-e-e-c-k, and there's one other
22 phrase that's going to probably come up that I had to consult my
23 French-speaking husband for, which is *scènes à faire*, which is
24 s-c-e-n-e-s a f-a-i-r-e. So those are just for the transcript.
25 Okay.

1 MR. KLAUS: Thank you, Your Honor. And the split
2 between the Veeck case on the one hand and the Ninth and Second
3 Circuit cases, that subsumes within it a number of issues
4 including merger and the idea-expression dichotomy.

5 The third issue that I'd like to cover briefly is the fair-
6 use defense that's been raised and why we think that that can be
7 resolved as a matter of law now.

8 Your Honor, we think that ultimately, turning to the first
9 point, this is really a question of what did Congress intend in
10 the Copyright Act. There are numerous arguments that we have on
11 the other side that have a lot of rhetoric behind them in terms
12 of there being an impingement of due process rights, an
13 impingement of the right of people to speak or to think about
14 the law.

15 I would note a point that I will come back to several
16 times. There is -- notwithstanding multiple years of litigation
17 with discovery into numerous issues, there is absolutely no
18 evidence to back up any of the claims that anyone has ever been
19 deprived access to the standards in issue.

20 There's no evidence that anyone has been deprived of
21 their First Amendment right to speak, much less that those
22 constitutional claims could be asserted against the property
23 rights of the plaintiffs in this case who have their own
24 constitutional issues lurking in the background in the form of a
25 potential taking by state action that would appropriate their

1 property and their copyright.

2 So you have constitutional avoidance questions that, at
3 best for the other side, cut in both directions, and really I
4 think ultimately counsel the Court back to the plain words and
5 the plain intent of the copyright statute.

6 Now, under § 102(a), it's plain that when the
7 underlying works are created, they meet all the standards for
8 copyrightability. They are original. They meet the original
9 requirements that were laid out by the Supreme Court in the
10 Feist case. They certainly have much more than a minimal degree
11 of creativity to them.

12 THE COURT: Mr. Klaus, does it matter if the standards
13 were created with anticipation or with the expectation that they
14 would be incorporated into law?

15 MR. KLAUS: No.

16 THE COURT: And why not?

17 MR. KLAUS: Because, first of all, what the evidence
18 actually shows is that that is -- and it's undisputed on behalf
19 of all the plaintiffs that the standards are used for multiple
20 purposes other than simply being created -- simply being enacted
21 into law. And they in fact have numerous uses that they are
22 used by people outside of simply a matter of legal compliance,
23 and those points are set forth in Mr. Thomas's declaration,
24 Mr. Pauley's declaration, and Mr. O'Brien's declaration.

25 So these are not standards that are solely, or as in the

1 hypothetical case that the defendant has raised, for example, a
2 K Street lobbyist who takes something to his or her favorite
3 legislator for no purpose other than to have that item enacted
4 into law. There's not a tradition of copyright protection for
5 such materials as there is copyright protection for these
6 materials. And the policy considerations, we'd say, are
7 completely different.

8 So we think the standards here were original in that they
9 have the minimum amount of creativity, they were not copied from
10 anywhere else, and there's nothing in the statute that says they
11 are not copyrightable when they are created.

12 To the extent that the statute speaks at all about
13 copyright protection for works that overlap with law, it's in
14 § 105 which says that works of the United States government,
15 meaning a work that's created or prepared by an officer or
16 employee of the United States in the course or scope of that
17 person's duties, are not subject to copyright protection.
18 Otherwise, nothing in the statute says that incorporation by
19 reference divests the standards of protection.

20 And we know from other legislation, Your Honor, specifically
21 the National Technology Transfer Advancement Act, NTTAA for short,
22 of 1995, specifically in 15 U.S.C. § 272(b)(3), specifically
23 expresses a preference for standards for federal agencies to
24 incorporate by reference.

25 There are a variety of policy reasons that underlie that,

1 but there is a recognition in that statute and in the continued
2 decisions of federal agencies, including the Office of the
3 Federal Register, including the Office of Management and Budget,
4 in our request for Judicial Notice No. 1, which is the Circular
5 A-119, that express a clear preference for federal agencies to
6 rely on voluntary consensus standards, numerous policy reasons
7 underlying that, numerous policy reasons that we think frankly
8 undercut a number of the parade of horrors of the lack of
9 transparency or accountability in government decision-making.
10 For example, the fact that voluntary consensus standards are
11 open to the public. There's not a danger of industry capture of
12 voluntary consensus standards.

13 And repeatedly, Public.Resource has made the same arguments
14 that it's making to this Court about the fact that incorporation
15 by reference necessarily divests the copyright to OMB, to the
16 Office of the Federal Register, and those arguments have been
17 repeatedly rejected.

18 Now, I'd like to turn, if I could, to the heart of the case
19 law dispute.

20 THE COURT: Mr. Klaus, let me ask you or your clients,
21 are they currently for sale, the standards at issue in this
22 case? You currently sell the standards?

23 MR. KLAUS. The standards as we publish them?
24 Correct. We do.

25 THE COURT: Is there any objection to sell the

1 standards since they're incorporated by reference? In other
2 words, do you have to sell them?

3 MR. KLAUS: That's an interesting question as to
4 whether they would have to be sold. If this were a case where
5 some governmental body incorporated the standard by reference,
6 and if the standard-setting organization said we're not going to
7 sell them, that would be a -- not only would it be a very
8 different case; you would probably come closer, at least at a
9 minimum, on the fair-use case to something like, for example,
10 the Swatch case that the defendants cite, and that's the case
11 where the company didn't want -- they claimed copyright
12 protection over the transcript of its earnings recording. But
13 it did that for the purpose of --

14 THE COURT: It's a close call.

15 MR. KLAUS: -- keeping it out of the public record.
16 And so what the interest of the copyright owner in that case was
17 trying to preserve had nothing to do with what the purposes of
18 copyright are.

19 THE COURT: But if you stopped selling the standards,
20 is it still reasonably available under the OFR's regulation,
21 especially if the regulation incorporating the standard by
22 reference says that it's available from the authorizing
23 organization?

24 MR. KLAUS: I think it would be a very hard case for
25 me or for anyone else to make if the standards weren't

1 available.

2 THE COURT: Okay. I have another question, but I'm
3 going to wait till you get to that.

4 MR. KLAUS: Sure. Let's talk briefly about the
5 distinction between the Veeck case and Practice Management and
6 the CCC case from the Second Circuit. Ultimately, that is the
7 main argument that Public.Resource advances here, which is that
8 this Court should follow the majority opinion of the *en banc*
9 Fifth Circuit in the Veeck case.

10 And I think it's important to emphasize at the outset of
11 this, Your Honor, there really are two lines of cases here.
12 There are two lines of cases that deal with the same issue.
13 There is a split of authority, and ultimately the Court has
14 to decide which one is the more persuasive of the two.

15 It's our position that the better reasoned cases, the cases
16 that are more sensitive to the precedent and to the policy
17 considerations here are Practice Management and CCC. With
18 respect to Practice Management, that's the Ninth Circuit case
19 that involved the HCFA regulations that incorporated by
20 reference the AMA's CPT. My apologies for all the acronyms
21 here.

22 In the Practice Management case, Your Honor -- first of
23 all, let's be very clear. Practice Management is not, as we
24 see some reference to it in the defendant's briefing and as
25 there were some references to it in the Veeck case trying to

1 distinguish it, a case about simply referring to some numbers
2 that the ABA published. There was a system that -- an entire
3 coding system that the AMA had, and the coding system --

4 THE COURT: The AMA.

5 MR. KLAUS: AMA.

6 THE COURT: Okay. I thought you said ABA.

7 MR. KLAUS: My apologies if I did. There are a lot of
8 letters to keep up with.

9 THE COURT: The ABA is not organized.

10 (Laughter)

11 MR. KLAUS: We may get a lot of stipulation for that,
12 Your Honor.

13 THE COURT: All right.

14 MR. KLAUS: The AMA's standards were incorporated.
15 The Ninth Circuit said so explicitly in the opinion. There were
16 federal regulations that incorporated those by reference.
17 Someone who wanted to be reimbursed for expenditures that were
18 reimbursable under Medicare, Medicaid, had to use that system.
19 There is no difference between that and the types of standards
20 that are at issue here.

21 And as the Ninth Circuit said in that case, ultimately the
22 question, they said, boiled down to whether or not the Banks
23 case from the 1800s established some divestiture of copyright.
24 This is a major point of difference between the Ninth Circuit
25 and the Fifth Circuit. What the Ninth Circuit recognized about

1 Banks, we think correctly, is that Banks is a case that says,
2 for purposes of the copyright statute, judges aren't authors.
3 Judges, in the course and scope of the opinions that they
4 write -- we certainly know judges can and do create things
5 outside of what they do and get copyright, but in the course and
6 scope of writing opinions, it's not subject to copyright
7 protection.

8 THE COURT: No matter how celestial the prose.

9 But let me ask you, didn't the Ninth Circuit, when they
10 looked at Banks, it focused on Banks' premise that there's a due
11 process premise in fair access to law. It seemed that the Court
12 in the Ninth Circuit considered the due process interest and
13 rejected it because of the fact that there was no evidence that
14 anyone wishing to use the copyrighted codes had any difficulty
15 obtaining access to it.

16 MR. KLAUS: Correct.

17 THE COURT: Is that what you're arguing here?

18 MR. KLAUS: That's the second ground that they
19 discussed, and that's also -- that's a point of departure with
20 the Veeck case. The Veeck majority said, we don't want to look
21 at evidence of availability or accessibility. Don't put that in
22 front of us; we don't care. We read Banks as establishing a
23 continuous tradition which we would submit, respectfully, there
24 is no continuous tradition of standards incorporated by
25 reference not being protectable.

1 But Practice Management does indeed say that accessibility,
2 that there is a due process consideration, and there's a
3 question that if somebody has to comply with a legal requirement,
4 can they have access to it. And this is very critical here,
5 Your Honor. There is no evidence -- again, after years of
6 discovery and litigation, there is no evidence that anyone
7 who has needed to comply with any of the standards that the
8 plaintiffs in this case publish or that are at issue here,
9 there's no evidence here that anyone has ever had any problem
10 gaining accessibility to any one of those standards.

11 In fact, the standards are all made freely available online
12 in online reading rooms. So, if anyone wanted to know what is
13 the particular requirement, they can go to the Internet and all
14 the standards are completely available. Again, not a shred of
15 evidence on the other side that there has been any problem of
16 accessibility.

17 THE COURT: How do the standards here differ from the
18 model codes that were at issue in Veeck?

19 MR. KLAUS: Well, the standards that are at issue
20 here were not -- and this goes to a question. So, first of all,
21 with respect to Veeck, the language that's in the majority
22 opinion -- and it's important to focus this. This is on page
23 293 F.3d at page 805. What the majority said here is that the
24 standards -- in the case of a model code, reading in the first
25 column, model code which the majority says is not protected by

1 copyright, loses its copyright protection when it's incorporated.
2 The text of the model serves no other purpose than to become
3 law. The characterization that the Court put on in the way it
4 decided the case was to say that SBCCI, the acronym for the
5 plaintiff there, operates with the sole motive and purpose of
6 creating codes that will become obligatory law.

7 And in fact, at the end, what the Court says -- and the
8 Court says the result in this case would be different but
9 recognizes we're potentially creating a circuit split and this
10 is the way out, is to say that we will characterize these codes
11 as having no purpose other than having been enacted to become
12 positive law.

13 And here, Your Honor, the undisputed evidence is that
14 that's not the sole purpose that the plaintiffs enact the codes
15 for. The evidence is that they are in fact used by business and
16 industry for purposes other than simply law, and there's not the
17 sole expectation that they will simply become law and simply be
18 incorporated and wholesale adopted.

19 In fact, what the evidence actually shows -- and this is
20 discussed at length in the ICC, International Code Council
21 amicus brief, is that actually numerous of the standards,
22 including the standards at issue here, when they are
23 incorporated by reference, federal agencies, state agencies may
24 adopt a portion of them.

25 For example, in the Practice Management case itself, you'll

1 see there's a reference to my client's standard, the National
2 Electrical Code, and there's a citation to a particular federal
3 regulation that doesn't incorporate the entire thing by reference
4 but incorporates particular portions of it.

5 There are other jurisdictions that may incorporate and make
6 various changes and amendments to them, but it's not the
7 paradigm that you have referenced in the Veeck case, which is
8 something that is simply put forward solely for no other purpose
9 than to become law.

10 The other point of distinction between Practice Management
11 and CCC and the Veeck case that we think is important is Veeck
12 starts out by saying, here's a Supreme Court opinion in Banks.
13 We're not going to look at it just as a matter of statutory
14 construction. We're going to say this settled the matter once
15 and for all in the 1800s, that anything that's incorporated by
16 reference automatically becomes the uncopyrightable law, free to
17 all to use.

18 But there was a backup argument that the majority put in
19 which was, even if it doesn't, there's a merger. At the moment
20 that a standard is incorporated by reference, the fact merges
21 with whatever is capable of being the copyrightable expression.
22 And we see the merger argument raised by the defendant in this
23 case, and the merger argument, we think, was quite properly
24 rejected in Practice Management. As the court said, the point
25 of merger is that, at the moment of creation, what was the

1 constraint on the author?

2 THE COURT: Your argument is that the merger -- for
3 the merger doctrine to apply, the merger doctrine analysis takes
4 place at the instant of the work's creation.

5 MR. KLAUS: That's correct. And that's -- the most
6 recent exposition of this was in the federal circuit's decision
7 in the Oracle v. Google case which deals with computer software
8 which has its own, in some ways, sui generis copyright analysis.
9 But the important point there is the merger discussion isn't
10 limited there, and it's also -- you see it in the Practice
11 Management case.

12 The question of merger is, we don't want the very first
13 person who writes "roses are red, violets are blue" to have
14 a copyright on the saying that roses are red. That is simply
15 taking that idea out there and removing it from circulation
16 because there are a minimal number of ways that any author could
17 have expressed that expression.

18 THE COURT: So there has to be no other ways of
19 articulating a particular idea when the work is first published.

20 MR. KLAUS: That's correct. And we know in this
21 case -- the record is clear in our case that, in fact, there are
22 other organizations who create standards on the same topics
23 here. I'd refer Your Honor to our statement of undisputed facts
24 38 and 133 by way of example on that. There's no dispute that
25 there is no constraint on any of the organizations here in terms

1 of their authorship, in terms of the types of creative,
2 expressive choices that they would have to make at the moment
3 of creation.

4 Practice Management, at 121 F.3d at page 520 in footnote 8,
5 specifically says this is the reason why we are not going to
6 apply the merger doctrine here. Judge Leval's opinion for the
7 Second Circuit in the CCC case is to the same effect, 44 F.3d at
8 72. What he says is merger is a judicially created doctrine,
9 and we will decide how and when to apply it depending on what
10 are the needs to leave the breathing room for creativity and
11 expression.

12 Just in the last few minutes that I'm going to try to take
13 for my time, Your Honor, let me talk about fair use, and the
14 main points I'd like to make on fair use are that the use here,
15 however it's described, is -- and whatever the purposes that are
16 claimed, is plainly substitutional. This is a defendant who is
17 engaged in the business of making wholesale copies, distributing
18 those --

19 THE COURT: What aspects of the defendant's actions
20 are commercial as opposed to political?

21 MR. KLAUS: Well, the question that the Supreme Court
22 tells us in Harper & Row is that the distinction between
23 commercial/noncommercial is not whether somebody says I'm out
24 to make a huge profit. It's not whether I'm General Motors or
25 whether I'm the NRDC. The distinction is whether you are

1 exercising a right that customarily one would have to pay for in
2 that context. But regardless of whether he's commercial or
3 noncommercial, the question really on the first fair-use factor,
4 Your Honor, on the transformativeness test --

5 THE COURT: I have a question. What would be a
6 transformative use of your standards?

7 MR. KLAUS: Well, I could -- I could certainly imagine
8 somebody writing, for example, an article about critiquing the
9 standards. I could certainly imagine somebody writing an
10 academic piece that would say I've got a -- I've got a problem
11 with this or here's how the standards have developed in this
12 area. I could certainly imagine numerous fair uses.

13 And that's one of the important points, Your Honor, is on
14 fair use, the answer to the parade of horrors that we have
15 from the other side about people being thrown in jail for
16 speaking the law, about people being subject to massive statutory
17 damages awards for daring to write.

18 The idea that copyright is somehow this omnipresent force,
19 that once it's conferred there exists this pressure that will
20 inevitably lead to people stopping talking about whatever the
21 standards are that have been adopted by jurisdictions, that's
22 just not true, and there would be plenty of cases of fair use
23 that would be perfectly fine.

24 There are plenty of uses that people can make of the works
25 in question. The issue is that the defendant's work here, what

1 the defendant is doing is entirely substitutional. They have
2 made the entire works available for copying for distribution
3 without limitation.

4 With all due respect to my friends on the other side, there
5 is no case in the history of fair use that has come close to
6 saying that a defendant who creates -- who engages in that sort
7 of verbatim copying and makes the entire work available in a
8 manner for copying for downloading, for distribution, that that
9 is in any sense for fair use.

10 And the two cases I would direct you to, Your Honor, the
11 most recent cases on this are -- calling them the Authors Guild
12 case does not help, because they're both Authors Guild cases
13 from the Third Circuit. But one is the HathiTrust, and one is
14 the Google Books case.

15 In the HathiTrust case, one of the claims of transformation
16 was that the HathiTrust had made searching easier for works.
17 It had a transformative purpose or function because the copying
18 made the works more easily searchable. That's one of the
19 arguments, by the way, that the defendant has raised. He said,
20 well, I, by converting these to HTML --

21 THE COURT: They're visually more searchable.

22 MR. KLAUS: Right, which I should also add
23 parenthetically, the evidence in the record is that a number
24 of the standards here are also made available in HTML and XML.
25 That is part of a license that one has to look to. I would

1 refer Your Honor to Mr. Thomas's declaration at paragraph 44 in
2 that regard.

3 The important point in the HathiTrust case, though, is the
4 court went out of its way to say no copy of the work is made
5 available as a result of the searching. So the transformation
6 that was done to enable searching allowed the computer, behind
7 the scenes, to find something and to refer the user to the
8 particular work, but it didn't make an exact copy available.

9 The Google Books case, also an Authors Guild case, also
10 from the Second Circuit, there's a wrinkle in the Google Books
11 case, which is that Google not only made searching easier by its
12 copying, but it also provided snippet view, which is --

13 THE COURT: And that was what was found to have
14 transformative -- was found to add value to the transformative
15 search function.

16 MR. KLAUS: It was found to add value to the
17 transformative search function, but Judge Leval went out of his
18 way to say that the snippet view did not operate as a substitute
19 for the work. There were a number of precautions that Google
20 had put in place that it would -- for example, when a word
21 search was done, it would return only the same portion of the
22 work. One couldn't game the system by putting together multiple
23 snippets and get the work. Works that were very short were
24 excluded from the snippet view so that somebody couldn't game
25 the system that way. Authors who wanted their works out could

1 opt out of the system.

2 And Judge Leval's quite clear that it was putting this
3 mechanism in that made the difference, and he in fact
4 specifically said that at 804 F.3d 217, that if the function --
5 not the purpose. Because the purpose, Public.Resource says,
6 well, we're making all of your works available, but we're doing
7 it for a different purpose because we just want the law out
8 there, and therefore we win on the first factor.

9 And what the Second Circuit said is, no, when you're
10 engaged in verbatim copying, the question as to whether or not
11 you win on that first factor is not what your purpose is, not
12 what your intent is; it's whether the function of what you're
13 doing is exactly the same as what the copyright owner does.
14 We'd say you have exactly the same thing here.

15 That conclusion, we think, drives the third factor, 100
16 percent copying, 100 percent of the work made available; and
17 also the fourth factor on market substitution, on the fact that
18 if this is fair use, if what the defendant here is doing is fair
19 use, there is no limitation to anyone doing the same thing.

20 One brief other point on fair use, Your Honor. There was a
21 claim that was made post hoc that this system was set up to make
22 these works available for the visually impaired. Like most post
23 hoc justifications, when you actually look at the facts and the
24 reality, that wasn't the purpose. What the HathiTrust case
25 again points the way here on, there's no question that making

1 works available to the print disabled is an important function.

2 The defendant's work doesn't just make the works available
3 to the print disabled; it makes it available to the entire
4 world. And, again, what the undisputed evidence shows is that
5 the one print-disabled person who told one of the plaintiffs --
6 my client, in fact -- that they had difficulty reading online,
7 they were given an entire copy.

8 The other plaintiffs have said, if somebody said that they
9 had a problem, we would give them a copy, or they could even go
10 to what claims to be the Chafee Amendment compliant site that's
11 operated by Mr. Fruchterman, who was the defendants' expert, and
12 obtain a copy. So we think, for that reason, the fair-use
13 defense is completely without merit.

14 I believe I've gone over. I'm happy to answer any questions.

15 THE COURT: No. I've been peppering you with them as
16 we go along. Thank you.

17 MR. KLAUS: Thank you very much.

18 THE COURT: Mr. Hudis.

19 MR. HUDIS: Good morning, Your Honor. Jonathan Hudis
20 for plaintiffs in the 14-857 case, American Educational Research
21 Association, AERA; American Psychological Association, APA; and
22 National Council on Measurement in Education, NCME.

23 Your Honor, in our briefs we refer to AREA, APA, and NCME
24 as the sponsoring organizations of the 1999 *Standards for*
25 *Educational and Psychological Testing*, the work that was

1 infringed in this case.

2 This is an even simpler case than the ASTM case, Your Honor.
3 Public.Resource, operated essentially by one person, Carl
4 Malamud, admits he digitally copied plaintiffs' standards and
5 published to the Internet for others to download, print, and
6 copy for free.

7 Public.Resource asks this Court to excuse its acts of
8 copyright infringement and contributory infringement as fair
9 use, stretching the limits of this defense well beyond its
10 breaking point, all while trampling on the copyrights of three
11 nonprofit organizations guaranteed to them by the Constitution
12 and the Copyright Act, and those are the rights to reproduce the
13 work, to prepare derivative works from it, to distribute copies,
14 and to display the work publicly.

15 It should be noted that, in addition to the copies of the
16 standards which can be purchased from the plaintiffs, their
17 standards are available at the U.S. Department of Education, the
18 Office of the Federal Register, and thousands of libraries
19 throughout the country.

20 THE COURT: Mr. Hudis, how much does it matter if you
21 can get the standards for free already, either through the OFR
22 or through libraries or read-only rooms, as you all have?

23 MR. HUDIS: Well, Your Honor, I was anticipating your
24 accessibility questions as to the ATSM plaintiffs, so we just
25 want to put that to rest.

1 THE COURT: Okay.

2 MR. HUDIS: So, as a legal matter, the answer is
3 nothing if defendant's theory of the case is correct,
4 Your Honor, that privately created standards lose their
5 copyright upon being incorporated by reference into the
6 regulations of an agency.

7 As plaintiffs' counsel said in the ASTM case, this Court
8 would be sanctioning a widespread taking of copyrighted property
9 without just compensation, in violation of the Fifth Amendment.
10 The standards development organizations do not have continuing
11 financial incentives to promulgate and update their valuable
12 works. Important stores of knowledge will no longer be
13 available to the public.

14 How to resolve the competing interest raised in this
15 litigation should be a decision for Congress to make, not the
16 court legislating from the bench. In the meantime, this Court
17 should uphold the sponsoring organization's copyright and enjoin
18 Public.Resource from further acts of infringement.

19 THE COURT: Mr. Hudis, I see that the 1999 standards
20 weren't sold for a period of time.

21 MR. HUDIS: Yes, Your Honor.

22 THE COURT: Is there any obligation to sell them since
23 they're incorporate by reference into law?

24 MR. HUDIS: Your Honor, that does not have a bearing
25 on the case, to answer your question. The fact is they are on

1 sale for a period of time so that the 2014 standards could get
2 into circulation. The 1999 standards were taken off sale. They
3 are now sold again on AERA's website.

4 THE COURT: Even during the period in which they were
5 not for sale, were they available through OFR or through some
6 other means?

7 MR. HUDIS: They were available in three places: the
8 U.S. Department of Education, through the Office of Federal
9 Register, and thousands of libraries throughout the country.

10 THE COURT: Okay.

11 MR. HUDIS: So the answer's yes.

12 Now, Your Honor, plaintiff's work, the '99 standards
13 infringed in this case, were a set of best practices of
14 guidelines in the creation, administration, scoring and use of
15 standardized tests, covering issues such as test validity,
16 reliability, comparability, fairness, and other items. The
17 sponsoring organizations don't keep the profits from these
18 sales, and they use the profits to fund further --

19 THE COURT: Does that matter?

20 MR. HUDIS: No, it does not, Your Honor. But we
21 are entitled to the fruits of our copyrighted work.

22 THE COURT: Right.

23 MR. HUDIS: Now as to authorship. The '99 standards
24 were born from an extensive revision of the 1985 standards by a
25 sixteen-member expert volunteer committee. Their work resulted

1 in over 50 percent of new content in the '99 version.

2 Although -- now, and this is important because it was
3 raised in Public.Resource's briefing. Although the drafts of
4 the '99 standards were published for comment, and many comments
5 to these drafts were received by joint committee, the ultimate
6 content of the 1999 standards came from the authorship of the
7 joint committee members.

8 Public.Resource has not submitted any admissible evidence
9 to the contrary, and in fact concedes in its summary judgment
10 brief at page 27 that the joint committee controls the final
11 product through the text.

12 THE COURT: So it's not creation by crowd sourcing or
13 anything like that.

14 MR. HUDIS: No, it is not. We have unrebutted
15 evidence in our record that says that the joint committee was
16 the ones who promulgated the final text. They did receive many
17 comments, but there is no evidence in the record that those
18 comments were incorporated word for word into our standards.
19 The final selection of that language was chosen by the joint
20 committee members.

21 Now, Your Honor, I'll skip over ownership because we
22 have that in another segment. Public.Resource confirmed its
23 infringing activities in its interrogatories and Mr. Malamud's
24 deposition testimony without permission. He bought a used copy
25 of the 1999 standards, which I have here.

1 He cut apart its bindings, scanned the entire book to an
2 Acrobat Reader PDF file with a self-made certificate, which we
3 handed up to Your Honor, and appended the certificate to the
4 front, published the PDF file to its own website, and also
5 published that file to the Internet Archive site. Importantly,
6 Your Honor, and which came up in the other argument, neither
7 side precluded users from freely downloading or printing the PDF
8 file. These facts are uncontested.

9 As to contributory copyright infringement, the self-made
10 certificates that you have before Your Honor are appended to
11 the front of the unauthorized PDF copy of the standards,
12 unmistakably states that the work was incorporated by reference
13 into regulations. In Public.Resource and Mr. Malamud's view --

14 THE COURT: You said this is a self-created
15 certificate?

16 MR. HUDIS: Yes. Mr. Malamud created it.

17 THE COURT: So this approved seal --

18 MR. HUDIS: That's all Mr. Malamud's creation.

19 THE COURT: Okay.

20 MR. HUDIS: In Mr. Malamud's and Public.Resource's
21 view, once incorporated by reference, the standards lose their
22 copyrighted protection and thereafter can be freely copied by
23 anybody. Therefore, the purpose of the certificate was to give
24 the public a false sense of approval or permission to download,
25 print, or copy the standards without authorization.

1 Additionally, and if you would look --

2 THE COURT: Well, isn't that one reading of it? One
3 interpretation of the self-created certificate is to create an
4 imprimatur of officialdom. I mean, it has a seal. It has an
5 official incorporator. It has a lot of citations to the Federal
6 Register. Isn't one interpretation of a certificate is just to
7 confer an imprimatur that it's an approved, official document?

8 MR. HUDIS: Until we took the deposition of
9 Mr. Malamud, one would agree with you, Your Honor. But the
10 purpose of putting up that up certificate was, in his view,
11 to tell the public that, upon incorporation by reference, the
12 standards were now losing their copyright and freely available
13 for everybody.

14 And he went even further, Your Honor. When he published
15 the standards to the Internet Archive site -- I've put several
16 of these in front of you, Your Honor. You can see at the very
17 bottom right, before the red at the very bottom, it says
18 "Creative Commons License." So we asked him about that at his
19 deposition, and he said, "This language included the creative
20 commons license, indicating that no rights were being asserted
21 over the item."

22 So, according to Public.Resource's interrogatory answers
23 and discovery taken of the Internet Archive, during the nearly
24 two-year period that the PDF file was published to the two
25 websites, the standards were accessed several thousand times.

1 We do not know who accessed the unauthorized, online copies
2 because Public.Resource refused to provide its web server logs,
3 and our discovery motion seeking their production was denied.

4 During the same two-year period that the unauthorized PDF
5 file was published online, the sponsoring organizations
6 experienced a precipitous drop in the sales of their standards,
7 which is inconsistent with a work of this longevity where we
8 typically would have seen a gradual year-over-year sales decline,
9 according to our expert, Dr. Geisinger. While ongoing work on a
10 new edition of the standards, ultimately published in 2014, was
11 announced during this period, this does not explain away the
12 considerable sales drop.

13 While members of the sponsoring organizations might have
14 wanted to wait for new editions of the standards, psychometrics
15 and educational testing students could not wait because the 1999
16 standards were still being assigned as cross-reading material.
17 We had become aware that students were obtaining free copies
18 online with Public.Resource as their source.

19 Now as to harm. Public.Resource still has the
20 unauthorized PDF file of the '99 standards in its possession.
21 If Public.Resource is successful in this suit, defendant can
22 easily republish the file to the Internet.

23 Further, Public.Resource's every intention, if allowed by
24 this Court to do so, is publishing the sponsoring organizations'
25 2014 standards to the Internet once incorporated by reference

1 into government regulations.

2 THE COURT: That's where your irreparable injury and
3 continuing harm argument comes in.

4 MR. HUDIS: Yes, Your Honor. And future harm to the
5 sponsoring organizations includes loss of future income to fund
6 further revised editions of the standards and public confusion
7 that the '99 standards are the current version of the standards
8 published by the sponsoring organizations, when they're not.

9 High-stakes tests, Your Honor, the gateways to educational
10 matriculation and attaining employment, must be properly
11 designed, administered, scored, and relied upon. There is thus
12 a high-societal value for the continuing update of the standards,
13 an important body work, produced for the general public.

14 Now, what could have Public.Resource done differently?
15 Public.Resource makes a red herring argument, as it did in the
16 ASTM case, that the purpose of its infringing activity was to
17 make the sponsoring organization's standards available to the
18 blind or people with less severe print disabilities.

19 If that was truly the case, Your Honor, Public.Resource
20 could have narrowly tailored access to plaintiffs' standards
21 to individuals with certified blindness or print disabilities
22 as provided under the Chafee Amendment such as Braille,
23 audiotape/CD availability, large font, video, screen, or closed-
24 circuit TV magnification, color contrast choices, human readers,
25 or limited search term availability as we discussed in the

1 HathiTrust and the Google cases.

2 Public.Resource could have imposed limitations on
3 the availability by methods as access -- methods of access by
4 credentials such as a user name, password, digital rights
5 management, fingerprint tracing of unauthorized downloads, and
6 access terms and conditions, all which was testified to by
7 defendant's expert, Mr. Fruchterman, that he and his company
8 practice on the Bookshare-Benetech website.

9 Your Honor, so we have met our elements of the cause of
10 action. We have a valid copyright, which is conceded,
11 copyrights of the entire work. We complied with the statutory
12 formalities of registration. We also here have copying as a
13 factual matter, and copying of the copyrighted material was so
14 expensive that it rendered the offending and copyrighted works
15 identical.

16 THE COURT: Mr. Hudis, what evidence do you have of
17 direct third-party copyright infringement?

18 MR. HUDIS: Your Honor, a good question.

19 Now direct copyright by third parties. Thousands of
20 Internet users access the standards on Public.Resource's
21 Internet Archive's website. We have that from the deposition
22 testimony and the interrogatory answers of Public.Resource, and
23 we have the deposition testimony of Internet Archive.

24 THE COURT: But that's based on like hits to the
25 website; right? What's your direct evidence that people

1 actually downloaded this material?

2 MR. HUDIS: Okay. So, Your Honor, the one piece of
3 evidence that we were looking for for that were the web server
4 logs. We never got them.

5 THE COURT: Right. You submitted, I think, an
6 affidavit -- or not an affidavit but an e-mail.

7 MR. HUDIS: Yes. Two sets of e-mails.

8 THE COURT: From, I think, a professor saying that the
9 students got it off the --

10 MR. HUDIS: Yes.

11 THE COURT: But notwithstanding admissibility
12 questions, because --

13 MR. HUDIS: That's hearsay, Your Honor.

14 THE COURT: Well, you're right. Is that it?

15 MR. HUDIS: No. No. So the users who pulled up
16 the standards on their web browsers displayed the copyrighted
17 material, at which time the copies were made in the random
18 access memory of their computers to permit viewing of the
19 materials. By displaying the work and making those copies,
20 even temporary ones, those users directly infringed the
21 copyright. Your Honor, during that same period of time is when
22 we experienced the precipitous drop in our sales.

23 So, Your Honor, we took as much circumstantial evidence
24 as we could give to you to muster. We have the period of time
25 from mid-2012 to mid-2014 when the standards were up on the two

1 websites. We have the proof of access, and we have the proof
2 that the sales went down. That's our circumstantial case
3 because we never got the web server logs. And I am sure learned
4 counsel for the defendant will tell us that we're all wet on
5 that, but that is our circumstantial evidence.

6 Your Honor, Public.Resource contends that a copy for
7 purposes of copyright is limited to physical objects and thus
8 did not make a copy of the standards in the legal sense. That
9 is absolutely false. The infringing version stored on
10 Public.Resource and Internet Archive's web servers are copies
11 for the purposes of the Copyright Act. Electronic copies of the
12 work stays on computer. Computers, with their RAM memories, are
13 copies under § 101 of the Copyright Act.

14 I've gone through the evidence of reproducing, of creating
15 derivative works, of distribution. Your Honor, I would like to
16 now turn to Public.Resource's defenses, unless you have any
17 questions.

18 THE COURT: That's fine.

19 MR. HUDIS: All right. Your Honor, Public.Resource
20 does not need to access the standards, free or paid for, in
21 order to comply with any of the government regulations or laws.
22 Public.Resource claims it has the right to post copies --

23 THE COURT: You have to slow down again, Mr. Hudis.

24 MR. HUDIS: Slow down?

25 THE COURT: A little bit.

1 MR. HUDIS: All right -- of our standards online so
2 that others can copy, print, distribute, or otherwise use them
3 for free. All of the cases relied upon by Public.Resource are
4 distinguishable. Wheaton v. Peters, Supreme Court decisions.
5 Banks v. Manchester, Ohio Supreme Court decision; Howell v.
6 Miller, Michigan state statutes; and let's talk about the Veeck
7 case which you brought up with my learned co-counsel.

8 Veeck involved a word-for-word reproduction of model
9 building code into legislation which does not apply to the
10 incorporation by reference of extrinsic standards, making Veeck
11 inapplicable in reasoning and result. The holding of Veeck is
12 that the law, whether articulated in judicial opinions or
13 legislative acts or ordinances, is in the public domain.

14 Importantly, Your Honor, at pages 803 and 804, Veeck says
15 clearly, "The limits of this holding must be explained. Several
16 national standards-writing organizations fear that copyrights
17 may be vitiated simply by the common practice of governmental
18 entities' incorporating their standards in laws and regulations.
19 This case does not involve references to extrinsic standards.
20 Instead, it concerns the wholesale adoption of a model code
21 promulgated by its author precisely for use as legislation.
22 Case law that derives from official incorporation of extrinsic
23 standards is distinguishable in reasoning and result."

24 A statute that refers to the law requires citizens to
25 consult or use a copyrighted work in the process of fulfilling

1 their obligations. Your Honor, importantly, copyrighted works
2 do not become law merely because the statute refers to them.
3 Discussing referenced works or standards created by private
4 groups other than incorporation by laws we have here, the Veeck
5 court explains that to the extent incentives are relevant to
6 existence of copyright protection, the authors in these cases
7 deserve incentives.

8 Now, my learned colleague brought up § 105 of the Copyright
9 Act. I'd like to give you the reverse or other side of the coin
10 to that, which is Copyright Act § 201(e): "No action by any
11 governmental body purporting to seize, expropriate, transfer, or
12 exercise rights of ownership with respect to the copyright, or
13 any of the exclusive rights under a copyright, shall be given
14 effect."

15 So the mere incorporation by reference, as learned counsel
16 said in Circular A-119, you have to be careful of the copyright.
17 Also, we've already discussed the CCC and Practice Management
18 cases, much closer on the facts to this case. I will not go
19 over them again. Your Honor, fair use.

20 THE COURT: Again, I'm going to ask you the same
21 question I asked Mr. Klaus, which would be, what would be a
22 transformative use of your standards?

23 MR. HUDIS: Mr. Klaus gave very good examples, and
24 I will use them here; that is discussing, commenting on,
25 critiquing our standards for one reason or another, and as a

1 matter of fact, that is done with our standards all the time.
2 But it is not the wholesale copying, and it is not the wholesale
3 copying and making available to the public for free of our
4 standards which Public.Resource did here.

5 THE COURT: And again, the same question. If you
6 stopped selling the standards, are they still reasonably
7 available under the OFR's regulation?

8 MR. HUDIS: Three places, Your Honor.

9 THE COURT: Libraries.

10 MR. HUDIS: Thousands of libraries, the Department of
11 Education, and the Federal Register office. So, yes, throughout
12 the country. So all of the amici -- you say, we need copies, we
13 need copies? They've got them. So the nature of our standards,
14 whether they are characterized as being core-expressive content,
15 which they are, or assemblage of facts, which they're not, is
16 usually not an important factor.

17 The third factor, Public.Resource misappropriated our
18 entire work, and Public.Resource's actions, as I've already
19 explained to the Court, will drastically affect the market and
20 value for plaintiffs' standards. It's just like in the ASTM
21 case. This is a wholesale substitution for the purpose for
22 which our clients promulgated these standards, making them
23 valueless, at least in a copyright sense.

24 Your Honor, some defenses also, in addition to fair use
25 that Public.Resource raised for the first time, at least in our

1 case, in their briefs should not be countenanced by the Court,
2 and that is the Copyright Act 102(b) systems process and
3 procedure bar, the idea-expression merger doctrine, and the
4 sense of fair doctrine, all of which, in any case, are
5 inapplicable, as we briefed.

6 Your Honor, there are two types of incorporation by
7 reference defenses that we have here, one which was in their
8 answer, the other one which was not, one which says, immediately
9 upon being incorporation by reference, it becomes a fact. That
10 was raised in their answer. We don't agree with that, and
11 that's what the Court's going to decide.

12 They're also saying that, by its very nature, these are all
13 saying the same thing, these three defenses raised for the first
14 time in their briefing, that it either is a system or process or
15 procedure, it's an idea or expression, or it is *scènes à faire*.

16 Your Honor, in each defense, there is no proof by expert
17 testimony what is the idea, what is the expression, what is the
18 system, and as a matter of fact, Your Honor, in our very
19 standards, it says at the beginning, "evaluating the
20 acceptability of a test or test application does not rest on the
21 literal satisfaction of every standard in this document."

22 THE COURT: You have to slow down again. We all speed
23 up when we read.

24 MR. HUDIS: You're right. Okay.

25 "The acceptability cannot be determined by using a

1 checklist." This is at page 4 of our introduction of the
2 standards, which is in evidence.

3 "When testing an issue in legal proceedings and other
4 venues, witness testimony, it is essential that professional
5 judgment be based on the accepted corpus of knowledge in
6 determining the relevance of particular standards in a given
7 situation. The intent of the standards is to offer guidance for
8 such judgments."

9 THE COURT: But even without that preamble, Congress
10 was aware of the potential issue that materials incorporated by
11 reference posed when it crafted § 105. Ten years before then,
12 it had given federal agencies the authority to incorporate
13 private works, and it expressly stated that they would not lose
14 copyright protection. So I'm not even sure that we need to go
15 any further than that.

16 MR. HUDIS: We would agree with you, Your Honor.

17 THE COURT: I guess that question is more appropriately
18 posed to defendants.

19 MR. HUDIS: Yes. So, Your Honor, there's also other
20 defenses that were raised. And by the way, none of these were
21 briefed whatsoever. They should just be dismissed out of hand
22 -- just looking for it. Unclean hands, copyright misuse, and
23 waiver and estoppel. We all -- the plaintiffs move for summary
24 judgment on that. Nothing was briefed by Public.Resource.

25 All right. So, Your Honor, I think I am just about out of

1 time. Unless Your Honor has any further questions, I will save
2 my remarks for the rest of the segments.

3 THE COURT: Thank you, Mr. Hudis.

4 MR. HUDIS: Thank you, Your Honor.

5 THE COURT: All right. Whose going to -- defendants,
6 you have 45 minutes, obviously. Are you going to break it up or
7 one person is going to do the duration?

8 MS. MCSHERRY: We're going to break it up, Your Honor.

9 THE COURT: All right.

10 MS. MCSHERRY: I think we have 50 minutes, I hope.
11 Perhaps we won't need it.

12 THE COURT: If says 45, but if you need to go to 50,
13 I think we're okay.

14 MS. MCSHERRY: Okay.

15 THE COURT: Yes.

16 MS. MCSHERRY: I'll try to keep my remarks as brief as
17 possible. I, like everyone else, is very conscious of how much
18 paper you've had to read. So I'm going to start with something
19 surprising, which is that, for once, I agree with my colleague,
20 opposing counsel, Kelly Klaus. This is a straightforward case.

21 We think it's straightforward in a slightly different way,
22 however. There are a lot of claims and defenses in this case,
23 but I think it does boil down to one core issue, which is that
24 the documents at issue here have been incorporated into law.
25 That's why we're here, in essence.

1 THE COURT: Well, let's start with the last question
2 I asked Mr. Hudis about. Hasn't Congress already ruled on this
3 issue? And if copyright protection is going to be stripped from
4 standards such as the one at issue here, isn't that something
5 for Congress to decide to do and not this court? It does seem
6 to be a matter of what the legislature wants. Copyright is not
7 for me to -- you know, I can't legislate copyright.

8 MS. MCSHERRY: Sure. And I wouldn't ask you to.
9 Let me take you back, if you would indulge me. I think we need
10 to take this back to first principles a little bit before we
11 decide what Congress is even allowed to do. We know what
12 Congress legislated against was a background of 200 years of
13 unbroken law that says that the law is not copyrighted. That
14 much I think is not controversial.

15 We have cases talking about opinions, cases talking about
16 statutes, cases talking about regulations. In case after case,
17 every court that's looked at this has said that the law is
18 outside of copyright, and there's a reason for that: because the
19 public has a fundamental due process and First Amendment right
20 to access the law and to talk about the law, and those rights
21 are sort of fundamental to self-government.

22 THE COURT: But by what standard are you asking that
23 I judge that the standards have enough creative expression to
24 warrant copyright protection? What standard should I apply if
25 deciding that?

1 MS. MCSHERRY: Well, I would suggest that you look to
2 the BOCA case and you look to the Veeck case and look to the
3 reasoning in both of those cases, and they looked at this issue
4 in two different ways.

5 First they looked at the tradition of case law that they
6 had before them and came to the conclusion that, due to due
7 process considerations in particular, the law was in the public
8 domain. So that was the first part of the decisions in those
9 cases.

10 And to be clear, the BOCA case, what the BOCA case was
11 doing was rejecting a preliminary injunction. But in the course
12 of that -- and then it remanded. But in the course of its
13 rejection, it explained its reasons why it thought that the
14 district court had got it wrong in holding that there was a
15 possibility of success on the merits with respect to the
16 copyrightability of codes.

17 So it's a really -- and I urge you to look to that case,
18 because it's a very detailed explication of the tradition of
19 case law that you also get in the Veeck case. But BOCA is
20 earlier, and it's really one of the first cases to look at the
21 problem of building codes and how we're going to look at them.

22 I think it's also important to understand that all of the
23 cases that have looked at this have looked at this one core
24 problem, which is that we have a conflict between the exclusive
25 rights that are granted to a copyright holder and our

1 constitutional rights to share the law and access the law.

2 So the only place it got strange is, you know, we have this
3 particular conundrum where we have this one area of law that
4 operates a little bit differently because -- and it's really an
5 artifact of history. The Code of Federal Regulations was
6 getting cumbersome. Yes.

7 THE COURT: I just want to clarify something on the
8 BOCA case that you mentioned, because you said that the district
9 court granted the request for preliminary injunction. But when
10 the First Circuit reversed that decision, it didn't do so based
11 on the merits.

12 MS. MCSHERRY: What it did is it remanded for further
13 discussion.

14 THE COURT: Right.

15 MS. MCSHERRY: But it also spent quite a bit of time
16 explaining why it thought the district court had got it wrong.

17 So it seems to me that when we talk about a circuit split,
18 we actually have a more substantial circuit split. It's not
19 just Veeck versus Practice Management.

20 We have Veeck and BOCA, and then, of course, we have the
21 long tradition of cases that precede that. But these are the
22 cases that most directly address our issue here, which is what
23 happens when you've got standards that are incorporated into
24 binding regulations and whether they're an exception to what is
25 otherwise very clearly the rule.

1 THE COURT: But isn't your case made more difficult
2 by the fact that you're not really asking -- this is more of a
3 case of a matter of ease of access. The codes and the standards
4 at issue here are accessible without -- you can look at them.
5 You can read them. You can go make a copy of them at your
6 public library if you need to if you don't have \$22 to buy them.

7 What you're asking for is to make them simply more easily
8 accessible; right? It's not that they're not available; it's
9 that they're not available as easily as you'd like them to be
10 available; right?

11 MS. MCSHERRY: Well, my client would certainly like to
12 make them more accessible, but that's actually sort of a second
13 point. The prior point is that if they are law, then of course
14 we should make them more accessible as technology makes that
15 possible. That's a wonderful thing. But either way, they're in
16 the public domain.

17 THE COURT: Well, Congress considered this when it
18 declared that simply by being incorporated, works didn't lose
19 copyright protection, and one of the reasons is because of the
20 public policy behind the creation of such standards, which is
21 they want organizations to continue to promulgate such standards
22 because they're for the public good.

23 If they rob them of copyright protection, then there is no
24 incentive to continue to promulgate these standards, and that
25 was a factor that Congress took into consideration when it

1 declared that simply being incorporated by a reference didn't
2 strip a work of its copyright protection. So I don't think the
3 jump is as easy as you make it.

4 You know, simply because it's been incorporated by a
5 reference doesn't make it the law. It's been incorporated into
6 certain laws, maybe, but the leap isn't quite that easy. And I
7 guess that's where my concern is. What is it about these
8 standards that you think make them the law?

9 MS. MCSHERRY: Well, there's a couple things that I
10 think make them the law. If you look at the IBR Handbook, for
11 example, and you look to the National Archives website, which
12 we've submitted to you, and in many, many other places there's
13 an agreement that these standards, once incorporated by
14 reference, have the force and effect of law.

15 THE COURT: And? In other words, one key focus of the
16 Ninth Circuit was whether there was evidence that individuals
17 had been denied accesses to incorporated works. Have you put
18 forth any evidence that anybody has been denied access, or are
19 you saying that's irrelevant?

20 MS. MCSHERRY: I actually don't think it's
21 irrelevant. I think it's an important thing that distinguishes
22 this case from Practice Management, because you're quite right.
23 Practice Management says there's no realistic threat here of
24 access to law, and if there were, that would raise due process
25 and fair use issues.

1 THE COURT: And in BOCA, similarly, the government,
2 the local government, anybody who wanted to see the building
3 codes had to go buy a \$22, or whatever it was, copy of the
4 codes. That's not the case here. There is not just one place
5 -- you don't just have to have money to get access to these
6 standards, and that's another key distinction between this case
7 and BOCA.

8 MS. MCSHERRY: So I think that the core question is
9 what does copyright grant in terms of how you can condition
10 access. So what we know is that, for example, one of the
11 plaintiffs, the AERA plaintiffs, took the 1999 standards off the
12 market altogether, until it came up in a deposition and they
13 made them available again.

14 The reading rooms that exist, you can only access them
15 subject to after you sign a contract and give over your
16 information, so it's subject to a lot of restrictions. And
17 that's what happens when you allow folks to have a copyright
18 in the law. What a copyright gives you, in any document, is a
19 right to control and limit and restrict access, and that's the
20 fundamental contradiction that --

21 THE COURT: But in the case of these standards, it's
22 not just that -- there's only a certain amount of control that
23 plaintiffs have. Once they're in the Office of Federal -- the
24 standards have to be available for viewing through the Office of
25 the Federal Register; right? Plaintiffs can't just say, you

1 have to give us money to see these or you don't get them. There
2 are other ways to get them.

3 MS. MCSHERRY: So what the plaintiffs -- what they're
4 obligated to do currently is to simply deposit a couple of
5 copies. So if you don't have the means to travel to Washington,
6 D.C., and make a copy of the standards --

7 THE COURT: Or go to a library?

8 MS. MCSHERRY: Or if it happens to be in your local
9 library, maybe it doesn't. And also, if you are print disabled,
10 you're going to have a harder time getting access to these
11 standards. And again, that's exactly what copyright confers.
12 It's that statutory monopoly that lets you do that, and all of
13 those restrictions are improper because they conflict with our
14 constitutional due process and First Amendment rights.

15 THE COURT: When Congress passed a National Technology
16 Transfer and Advancement Act, it surely knew that the standards
17 directed agencies to incorporate reference were copyrighted.
18 Since the copyright protections are also statutory, wouldn't
19 Congress have explicitly indicated that it was expanding the
20 type of government works that cannot be copyrighted if it wanted
21 to do that?

22 MS. MCSHERRY: Well, I think that Congress didn't
23 need to do that, for two different reasons. One is because we
24 already had -- well, two things. One is statutory right can
25 never trump a constitutional right. So we'll take that as a

1 given. But secondly, the Copyright Act actually contains
2 carve-outs --

3 THE COURT: Right.

4 MS. MCSHERRY: -- for the law, the merger doctrine
5 and 102(b), which both reflect this idea of the idea-expression
6 dichotomy. And I would point you to a case that came later,
7 but if you look to the case of Golan v. Holder, that's a Supreme
8 Court case, and one of the things that that case says is when
9 you have a tension between copyright and the First Amendment,
10 we have certain doctrines that help resolve that tension. One
11 of those is the idea-expression dichotomy. The other is fair
12 use. And I would suggest to you that that's exactly what the
13 Veeck court was up to.

14 It recognized it had a constitutional tension, and it
15 looked to merger, it looked to 102(b), to resolve that tension.
16 The plaintiffs in this case talk a lot about constitutional
17 avoidance, but I would submit to you that the Veeck approach
18 and the BOCA approach are actually what gets you out of the
19 Constitutional conundrum that you might otherwise have.

20 THE COURT: You're asking this Court to balance the
21 policy goal of unrestricted access to privately authored
22 materials with a policy goal of providing continued incentives
23 to private organizations to continue developing standards.

24 Isn't that kind of balancing -- didn't Congress already do
25 that when it passed the Copyright Act and didn't list

1 incorporated by reference works among those that cannot have
2 copyright protection under § 105?

3 MS. MCSHERRY: Well, again, I would suggest to Your
4 Honor that Congress didn't think it had to because it already
5 had these carve-outs for the law, and it was legislating against
6 200 years of case law, saying that the law was out of copyright.
7 So they didn't need to reach this.

8 The other thing that I would suggest is I do think this
9 issue of incentives is quite important, and the plaintiffs talk
10 a lot about this wonderful public-private partnership. And I
11 don't disagree that there is a powerful partnership that happens
12 here, but I think that it's false to suggest that no incentives
13 will exist if the plaintiffs can't claim a copyright in works
14 that have been incorporated into law. I think, to the contrary,
15 they have tremendous incentives already.

16 The fact that their documents are incorporated into law is
17 very beneficial to them. They use it as a marketing tool
18 because there's a -- do I have... excuse me just a moment.

19 I'll share with you just one example, if I may. This is
20 an e-mail that NFPA sent out. It's an exhibit to our motion to
21 strike, and it says, "Be confident that your electrical work
22 complies with California law." So they know that the NEC, the
23 National Electrical Code, has been incorporated into law, and
24 they use this as a marketing tool.

25 This is reflected also in the fact that when they write,

1 the NEC Style Manual specifically advises the folks who are
2 working with it on how to write code-compliant regulations.
3 They know their works are going to be incorporated into law.
4 They benefit from their works being incorporated into law
5 because it's a basis of other marketing.

6 They also benefit because, as they said, and there's a lot
7 of testimony about this, they want their works incorporated into
8 law because that makes them mandatory, and they think that makes
9 the world more safe. They may very well be right.

10 THE COURT: The Fifth Circuit in Veeck said that,
11 unlike model codes that are wholly adopted into law and impose
12 legal obligations, these incorporated standards -- and I guess
13 that's where the plaintiffs assert that they differ from Veeck
14 -- these incorporated standards are only required to be
15 consulted or used in the course of fulfilling existing legal
16 obligations. They're not binding law.

17 So isn't that what the cases here -- I mean, Veeck drew
18 that distinction, and don't plaintiffs fall on the other side of
19 that distinction? In other words, the standards at issue here
20 have been incorporated, but they themselves don't -- in other
21 words, plaintiffs can't send out e-mails saying if you don't
22 follow our codes or our standards, you're falling afoul of the
23 law. They can only say to the extent they're being -- they're
24 not like building codes or model penal codes or commercial
25 codes; right?

1 MS. MCSHERRY: I would disagree with you, Your Honor.
2 If I build a building and it doesn't comply with the National
3 Electrical Code, I'm going to face penalties. If I don't comply
4 with a national fire safety code -- the various ones, there are
5 many -- I'm going to face penalties. But also, if I'm a parent
6 and I want to know if the school that my child goes to is
7 complying with fire safety regulations, I want to know what
8 those fire safety regulations are because it's supposed to be
9 built to that code. That's what incorporation by reference
10 means. It means it has the force and effect of the law.

11 THE COURT: Once it's incorporated.

12 MS. MCSHERRY: Once it's incorporated. That's
13 correct. One other thing I'd like to speak to is this issue of
14 Veeck and intent. So, first of all, I'd like to just clarify
15 that the Veeck holding was based on two separate grounds.

16 The first part of the Veeck holding, the Veeck court looks
17 at the Banks cases and concludes that the due process
18 considerations there apply with respect to model codes as well.

19 But the issue of intent. So the Veeck court's merger
20 analysis does not depend on intent. The Veeck court's merger
21 analysis depends on its conclusion that, once incorporated by
22 reference into law, the expression and the idea merge. There
23 is no other way to describe what you have to comply with. Just
24 like the Constitution, just like the tax code, the Code of
25 Federal Regulations works the same way.

1 THE COURT: The standards here that are incorporated
2 by reference provide guidelines and procedures in some of them
3 that individuals or entities have to use or reference in
4 fulfillment of their legal obligations under federal
5 regulations. But again, and I think this is a significant
6 difference, there's no evidence that anyone here has been denied
7 access to the standards. What you're arguing is that people
8 should have better access to the standards. That wasn't the
9 case in Veeck, was it?

10 MS. MCSHERRY: So what I'm arguing is that the law is
11 not copyrightable, and, therefore, as technology develops, we
12 can make access better and better and better. Access comes
13 second. Access is important, but it is not the only thing.

14 THE COURT: Some of the standards that have been
15 presented to me, for example, ASTM, the 86-07, which is at page
16 107 and 6, include what a law review article refers to as
17 secondary references where to fully comply with the standard you
18 also have to comply with a list of other standards. So what's
19 your position on whether these secondarily referenced
20 standards -- have those also lost copyright protection?

21 MS. MCSHERRY: So I think what --

22 THE COURT: Even if they're incorporated into the
23 incorporated standard or they're included in the incorporated
24 standard?

25 MS. MCSHERRY: Where does it end?

1 THE COURT: Yeah.

2 MS. MCSHERRY: So I think where it ends is I would go
3 back to the CFR, to the Code of Federal Regulations, and ask
4 what has explicitly incorporated there, which is what we're
5 presented with here.

6 Now, if there's further references on top of that that
7 aren't explicitly incorporated, I think we might understand that
8 differently, and in any event, my client doesn't publish those.
9 He's trying to publish and create a sort of grand, unified CFR,
10 because what we have right now is a very disjointed Code of
11 Federal Regulations where we have sort of one code of
12 regulations that's online that you can see. But then it refers
13 out to hundreds of other standards that you then have to
14 separately consult if you want to understand what the law is.
15 That's the core of our problem.

16 I'd like to talk a few minutes about -- well, I think I
17 want to answer a question that I think you were asking earlier
18 about Veeck's focus, also on intent, and that building codes,
19 the model codes in that case, were intended to be created into
20 law. I think I've already referred to this, but I would say
21 this again. There's ample evidence in the record that the
22 standards organizations know very well and very much want their
23 standards to be incorporated into law.

24 THE COURT: And? I mean, of course. If you
25 promulgate standards and you sell them, isn't it better for you

1 if your standards are promulgated into law because more people
2 will want to buy them? Does that rob them of copyright
3 protection, the fact that they hope that some governing bodies
4 or some local governments or federal governments will incorporate
5 their standards? Doesn't that mean they've been successful?

6 MS. MCSHERRY: Well, I think what it just speaks to is
7 this question that I think the plaintiffs have tried to suggest,
8 that Veeck turns on the intent of the creator, and I'm just
9 simply trying to answer that question --

10 THE COURT: And their intent is?

11 MS. MCSHERRY: Their intent is to have them made into
12 law, and that's fine. Again, I have no quarrel with that, and I
13 think having stuff being incorporated into law is a tremendous
14 marketing tool. But it also helps make us all safer. We don't
15 quarrel with that either.

16 What we quarrel with is the proposition that once one has
17 accomplished that goal of incorporation into the law, somehow
18 you still get to control and restrict access forever. We have a
19 plaintiff, again, who took one of the standards off the market
20 altogether. And the reading rooms that exist, they exist now.
21 They may or may not exist tomorrow.

22 THE COURT: But isn't the solution to that issue the
23 responsibility of Congress? I mean, if Congress wanted to strip
24 materials incorporated by reference of all copyright protection,
25 they could do so very easily and very clearly. And your argument,

1 well, they didn't need to do that in this case is -- you know,
2 nobody wants to try to figure out what's in the mind of Congress
3 when they do something, but when they have the power to enact or
4 to declare what's covered by a copyright or not, they do so.

5 The fact that they explicitly left works incorporated by
6 reference with copyright protection means that you want me to
7 now say, well, Congress, I know you said that they have
8 copyright protection, but, actually, under these circumstances,
9 they don't. And isn't that action one that's really meant for
10 the legislature?

11 MS. MCSHERRY: I don't think so, Your Honor. For one
12 thing, I don't think that Congress can make an unconstitutional
13 bargain, and so if there are, as we believe, the fundamental due
14 process and free speech considerations in play here, Congress
15 can't write a statute --

16 THE COURT: Copyright protection comes from the
17 Constitution as well. I mean --

18 MS. MCSHERRY: Copyright protection is -- sorry.

19 THE COURT: It is of constitutional dimension, and
20 therefore -- if we're talking about what the framers wanted
21 in district court, we're in trouble. One could argue that
22 copyright, having derived from the Constitution, that Congress
23 is well aware of what it can do and not within the Constitution
24 even in the face of the Due Process Clause.

25 MS. MCSHERRY: I completely agree with you.

1 THE COURT: Is there a case you can cite to me where
2 a court has done what you're asking me to do where the standards
3 were available? Not where the standards had to be purchased,
4 but where someone without funds could access the standards.

5 MS. MCSHERRY: So, actually, I think in the Veeck
6 case, if you wanted to go get hold of them and you wanted to go
7 to this little town, the person who posted the standards online
8 was able to acquire them. So you can get hold of the standards.
9 But again, I want to reemphasize that this case does not turn
10 simply on accessibility. That's just a benefit of it.

11 THE COURT: Right. Because you're saying that the
12 standards were already basically not capable of being copyrighted
13 once they were incorporated by reference.

14 MS. MCSHERRY: That's correct. And, Your Honor, I
15 would say to your earlier question, of course copyright derives
16 from the Constitution as well. But nonetheless, it's very clear
17 that copyright is a statutory right, and statutory rights don't
18 trump constitutional rights.

19 THE COURT: Can you cite me a case where a court has
20 said that regardless of their accessibility, once a standard has
21 been incorporated by reference into a law, it loses copyright
22 protection?

23 MS. MCSHERRY: I think that's exactly what the Veeck
24 case is saying. I think that's what that case is saying, and I
25 think it's what the BOCA case is saying. And they're saying it

1 against a background of hundreds of years of case law.

2 I'm mindful of my time, and I want to make sure I leave
3 time for the remaining issues, so I just want to touch on a
4 couple of other issues.

5 One is with Practice Management. Again, Practice Management
6 said there was no realistic threat of access. I think we do
7 have that here. I don't think the case turns on that, but it
8 does acknowledge that if there were such a threat, they would be
9 more concerned about due process. But that evidence is simply
10 not before the Court.

11 The other thing that Practice Management was worried about
12 and CCC was worried about is depriving the SDOs of incentives,
13 and as I think we've discussed, there are plenty of incentives
14 that would still exist.

15 The final thing I want to speak to is the issue of takings,
16 because there's been sort of a lot of hand-waving around about
17 maybe creating a takings problem.

18 THE COURT: Well, I want to ask you, what about -- in
19 its Notice of Proposed Rulemaking, OFR relied on your argument
20 -- well, it addressed your argument, and it ultimately rejected
21 a proposal to require free online access to standards in its
22 "reasonably available" determination.

23 It said, "If we required that all materials IBR'd into CFR
24 be available for free, that requirement would compromise the
25 ability of regulators to rely on voluntary consensus standards,

1 possibly requiring them to create their own standards which is
2 contrary to the NTTAA and the OMB Circular A-119."

3 Doesn't that indicate a congressional intent to continue
4 to give copyright protection for standards incorporated by
5 reference?

6 MS. MCSHERRY: I think the OFR came to that conclusion
7 because the SDOs came and said the exact same thing they're
8 saying here, which is we'll take our toys and go home if we're
9 not allowed to have copyright protection.

10 THE COURT: But isn't that factor perfectly reasonable
11 for Congress to consider? In other words, the Congress can say,
12 look, if we strip these standards of copyright protection,
13 there's not going to be any more of this voluntary consensus
14 standard development, and we're going to have to -- it's going
15 to be a problem for the government. So, in return for that,
16 we're going to allow them to continue to keep their copyright
17 protection. Isn't that something that Congress is allowed to
18 do?

19 MS. MCSHERRY: Congress could do that, but I don't
20 think that's actually what Congress did.

21 Now, what the CFR said, it went through a lot of the
22 arguments, and it said we think it's beyond our authority to
23 do what the petitioners, including my client but not just my
24 client, want us to do. We think it's beyond our authority to
25 interpret reasonable availability in the way you want to.

1 We think that it will cause problems for the agencies in
2 terms of monitoring compliance. So they had various concerns,
3 but those concerns don't apply here, because what we have here
4 is my client who's willing to make these standards available
5 right now, very easily, and it doesn't depend on any agency
6 action whatsoever.

7 Just two final points. Again, with respect to the takings
8 question, what I would like to say about that is, in addition to
9 the fact that I don't think it's a credible concern given the
10 tremendous benefits of incorporation by reference, aside from
11 the ability to sell the standards -- which, by the way, most of
12 the standards aren't much used anymore anyway except for as law.

13 But the other thing that I think we can say with respect to
14 takings is that essentially that's a different process. In the
15 Veeck case, in the wake of the Veeck case, we didn't see a
16 takings claim, and if the standards development organizations
17 want to try to bring a takings claim, which I think, again, is
18 unlikely, if they were to bring it, that's a whole separate set
19 of facts to present to the court.

20 THE COURT: Let me ask you a question regarding the
21 merger analysis.

22 MS. MCSHERRY: Sure.

23 THE COURT: Could I find that the standards lost
24 copyright protection under the merger doctrine but not find that
25 they've lost protection by becoming law? Could I do both those

1 things?

2 MS. MCSHERRY: I think that -- so the -- you mean once
3 they've been incorporated by reference?

4 THE COURT: Right. In other words, could I find that
5 they retain their protection by becoming the law, but they lose
6 protection under the merger doctrine?

7 MS. MCSHERRY: I think that you have to say that they
8 lose protection under the merger doctrine because they become
9 ideas, and the idea and the expression merge. Essentially, they
10 become facts.

11 THE COURT: Okay. Is your merger approach a separate
12 theory or just a subpart of your public domain theory? Because
13 it wasn't clear to me.

14 MS. MCSHERRY: Okay. I tend to think they go
15 together. The way that I conceive of them is that the first is
16 really I think the way the Veeck court tried to conceive of it,
17 which is first we have our due process concerns. And following
18 that case law, we have to say that anything that's been
19 incorporated into law, made regulation, is out of copyright; and
20 so Veeck could make a copy of the law -- and the court stresses
21 that at 800 -- could make a copy of the law under Banks and
22 related cases.

23 But then the second portion of the analysis is to then look
24 to the Copyright Act and see if there's a way to reconcile that
25 fact with what already exists in the Copyright Act. So the

1 Veeck court turns to the merger doctrine and says, in addition,
2 even if -- the quote is, even if Banks fails, I can still look
3 to merger to find that these model codes have been incorporated
4 by reference into law, and therefore the idea and expression
5 have merged. They're facts like the tax code, like the
6 Constitution.

7 If you don't have further questions -- sorry. You do.

8 THE COURT: Well, the *scènes à faire* doctrine, I have
9 to confess I'm not quite sure how it's applicable here. Are you
10 arguing that if somebody tried to write their own standards on
11 the exact topic as one of the standards here, they would still
12 have to be identical down to the word choice and the punctuation?
13 Is that my understanding? I was a little confused by your
14 argument on this.

15 MS. MCSHERRY: So that argument in particular goes to
16 the copyrightability of the standards as such, and our argument
17 is that if you look at how they're created, they're very much
18 shaped by external factors that are external to the sort of
19 creativity of anyone involved in drafting them.

20 THE COURT: Okay. All right.

21 MS. MCSHERRY: Okay. Thank you, Your Honor.

22 THE COURT: Thank you.

23 Oh, I'm sorry. My court reporter needs a break. He's been
24 going for -- and we're running behind. We just keep plowing
25 along.

1 (Recess from 10:44 a.m. to 10:54 a.m.)

2 MR. BRIDGES: Good morning, Your Honor.

3 THE COURT: Good morning.

4 MR. BRIDGES: I'm Andrew Bridges, also representing
5 Public.Resource.

6 THE COURT: Good morning.

7 MR. BRIDGES: And I will address fair-use issues,
8 which are vitally important to the case. Before I get to my
9 statements that I'd like to make --

10 THE COURT: Oh, and I have pushed my meeting to 1:00,
11 which means we're only five minutes behind instead of half an
12 hour or something.

13 MR. BRIDGES: Thank you, Your Honor.

14 Before I get to my own point, I wanted to address something
15 that Mr. Klaus said on the other side: No case in the history
16 of fair use has endorsed an entire work being made available
17 widely for download or distribution.

18 Well, I'd like to call the Court's attention to a number
19 of cases that did exactly that. Important cases. Cases from
20 various United States Courts of Appeal.

21 I refer to the Court to Núñez v. Caribbean International,
22 First Circuit. Full copies of original pictures of a model
23 were widely disseminated by a newspaper when it became
24 newsworthy that this model, who had some racy photos, had become
25 Miss Universe Puerto Rico. The First Circuit found fair use

1 from that widespread publication of the full photos.

2 The Second Circuit, in Swatch Group v. Bloomberg, found
3 fair use the widespread online dissemination of materials from
4 investor conferences that Swatch Group claimed a copyright in.

5 THE COURT: But the Swatch case in particular, that
6 was the case where the conference call was closed, and without
7 the dissemination of the materials, the materials would not have
8 otherwise have been accessible, the information.

9 MR. BRIDGES: That's a different point, Your Honor.
10 What Mr. Klaus said is there is no point in the history of fair
11 use where an entire work was disseminated broadly to the public.
12 His point was an entire work plus public dissemination. It
13 wasn't about the nature of the original work or the circumstances
14 of the original work.

15 But to address your issue, the Ninth Circuit in
16 Hustler v. Moral Majority, where Larry Flint had basically sent
17 up Jerry Falwell in *Hustler* magazine, and Moral Majority, only
18 bleeping out some obscene or offensive words, disseminated
19 widely for fundraising purposes the entire item featuring
20 Mr. Falwell.

21 Righthaven v. Jama. Now, I've given you appellate cases,
22 but there's also an important case out of the District of
23 Nevada, 2011. Righthaven v. Jama found fair use in the
24 widespread public dissemination of an entire article from the
25 Las Vegas newspaper.

1 So the notion that fair use doesn't allow widespread
2 dissemination of an entire work is simply wrong, and Mr. Klaus
3 referred to the HathiTrust decision in the Second Circuit
4 because that case does talk about certain security features that
5 HathiTrust imposed. But that's not necessary. That was
6 incidental to that one decision, and it's wrong to ignore all of
7 these decisions that do allow entire works broadly disseminated.

8 THE COURT: And that may be, but how is that germane
9 to this discussion here? In this case, there's no evidence that
10 has been proffered that the standards at issue weren't otherwise
11 available. I can definitely see a fair-use argument being made
12 for a situation in which, absent the fair use of the material,
13 the information would not otherwise be accessible.

14 MR. BRIDGES: Your Honor, whether they are otherwise
15 available actually doesn't make a defense to fair use at all.
16 It really doesn't. And I'll go through the standards. I just
17 wanted to address the cases --

18 THE COURT: So is it your position that -- where's the
19 line drawn? I can -- you know, if there's a book coming out,
20 the latest *Harry Potter* book is coming out and it's copyrighted,
21 can you download the entire book and make it available to the
22 public? No.

23 MR. BRIDGES: Likely, no. And that's nothing close to
24 our argument. I think it might be helpful if I go through the
25 factors. I just wanted to rebut the point that Mr. Klaus had

1 made that there had been no case in the history of fair use
2 about entire works being disseminated.

3 THE COURT: That's less important to me. All right.

4 MR. BRIDGES: So let me just explain. First of all,
5 I think the parties agree that fair use is amenable to summary
6 judgment, and we have summary judgment in Nuñez and Authors
7 Guild v. Google. It's important to understand that fair use is
8 outside the statutory monopoly of copyright.

9 Section 106 gives the rights of the copyright author, and
10 the section starts with the wording, "Subject to § 107." That's
11 fair use. Section 107 states fair use.

12 It says, "Notwithstanding the provisions of § 106, fair use
13 is not an infringement of copyright." There's a boundary zone
14 between the rights of the author and fair use. Fair use,
15 therefore, takes nothing away from a copyright holder because
16 the rights of a copyright holder don't extend into fair use
17 anyway.

18 THE COURT: How is downloading a set of copyrighted
19 standards in their entirety and placing them on the Internet for
20 free fair use under the definition of fair use as I have it?

21 MR. BRIDGES: Well, Your Honor, to begin with,
22 let's talk about the structure of fair use in the statute.
23 The statute says there are four factors to be taken into
24 account; and it specifies the factors, and I will go through
25 them. Campbell v. Acuff-Rose also explains that the task of a

1 court is to analyze all four of those factors in light of the
2 constitutional purpose of copyright, which is to promote the
3 progress of science in the useful arts.

4 So let's go through those factors, and I will say this.
5 You've heard about some constitutional issues. As the Supreme
6 Court has said, fair use as a doctrine brings First Amendment
7 considerations into the Copyright Act. It has built-in First
8 Amendment accommodations.

9 So the first nonexclusive statutory factor -- let me back
10 up. Section 107 gives the four factors. It also gives several
11 examples of paradigmatic fair use in the introduction to the
12 section. It says, "Fair use, including" and it has several
13 examples, "is not an infringement." And then it gives the
14 factors.

15 The first factor is the purpose and character of the use.
16 This is the defendant's purpose and character of the use, and
17 the purpose and character of Public.Resource's use is for a
18 very, very important public benefit. It is to report the law.
19 It says what the law is. When you saw that certificate that
20 Public.Resource distributes, that is underscoring -- it's making
21 a political point. It says, This is law.

22 THE COURT: But the point of the matter is, this law
23 as you call it, these standards, are available in libraries.
24 They're available in the Office of the Federal Register.
25 They're available in reading-room online sites. What you're

1 doing is making the standards available for downloading by
2 someone who, for example, could download the standards and sell
3 them; right?

4 MR. BRIDGES: That is not the purpose.

5 THE COURT: Right. You have purpose, and then you
6 have reality. And Congress decided that, and the framers -- and
7 we're back to the framers -- decided that copyright existed to
8 give the benefits of ownership to people who created material so
9 that people would continue to create material.

10 Congress decided not to strip copyright protection for all
11 material that was referenced by law, for that same reason,
12 because, otherwise, people would stop promulgating these
13 standards or people would stop promulgating whatever it was that
14 was being incorporated by reference.

15 But what you're saying is, because our purpose is noble and
16 good, then it's fair use. The problem is, your purpose may be
17 noble and good, but despite that, you are stripping the
18 creators, the owners of the copyrighted material, of commercial
19 use of their product.

20 MR. BRIDGES: Your Honor, the Supreme Court did
21 exactly that. It incorporated the full lyrics of "Pretty Woman"
22 in the opinion of Campbell v. Acuff-Rose, and if my purpose is
23 to distribute copies of that opinion and some people use it to
24 get access to the lyrics of that song, well, that wasn't my
25 purpose. It's not chargeable to me. But the Supreme Court put

1 the full lyrics in its opinion, and I'm allowed to have my
2 purpose.

3 THE COURT: But the Supreme Court, somewhere in there
4 there was an opinion. The lyrics of the song were part of the
5 opinion, but the purpose of that publication of the lyrics was
6 because they were involved in a Supreme Court opinion. You're
7 not doing anything but lifting these standards wholesale and
8 putting them on a website.

9 MR. BRIDGES: Your Honor, that comes to the third
10 factor of fair use, and I will go there. Well, actually, the
11 third factor, as I think Campbell says and as HathiTrust says,
12 the third factor on amount and substantiality of use depends on
13 the first factor, what the purpose is.

14 The third factor, the amount, depends on the purpose. And
15 what's the purpose here? It's to report the law. That's where
16 all the focus has been. The purpose of the defendant is also to
17 make the law amenable to research and scholarship.

18 One can do textual analysis, data analysis on these that is
19 not available in any other way. That's why these were
20 reformatted into HTML. They are word searchable by the public
21 in a way that the reading rooms can't be done. The reading rooms,
22 Your Honor, they've got a document that basically talks about
23 how they're making the reading rooms inconvenient. That's their
24 purpose, is to make it inconvenient so that they can sell it.

25 Public.Resource's purpose is to make the law available to

1 the public, and there is no other way to make the law available
2 to the public than by presenting the law itself. It is a
3 factor. It goes to the merger point Your Honor made earlier.

4 When something becomes the law, that text is now a fact.
5 It is the law. So Public.Resource is getting these re-keyed so
6 that they are text searchable and so that they are accessible to
7 the blind. It wasn't the sole purpose by any means, but it's
8 something that the plaintiffs haven't done because of what the
9 defendant has done.

10 THE COURT: Public.Resource started doing that after
11 this lawsuit was filed, didn't it?

12 MR. BRIDGES: No. I believe it was done beforehand,
13 Your Honor, and it's been part of the process. So the purpose
14 is to facilitate research and scholarship. The purpose is to
15 foster inclusive access for persons to this.

16 Now, the purpose is also noncommercial. Public.Resource
17 is not trying to go into competition with the plaintiffs.
18 Remember that the only standards that Public.Resource has acted
19 on are standards that have become law. This is not about
20 competing with the thousands of standards that they do. This is
21 about 250 standards, roughly.

22 Commerciality does enter into the first factor of purpose
23 and character here, and Campbell v. Acuff-Rose, that was
24 commercial. The Supreme Court endorsed it. Swatch Group v.
25 Bloomberg was highly commercial. The Second Circuit endorsed

1 it. Nuñez v. Caribbean International, highly commercial.

2 The First Circuit endorsed it.

3 I'd like to go to another important aspect of the purpose
4 and character of the use, and that's the transformative use.
5 What's important here is that transformative use means a new and
6 different use or purpose. It does not mean that the work has to
7 be different. In all the cases I've been discussing up to now,
8 there was no change in the work itself, but the original work
9 was used for a new and different purpose.

10 For example, there's a Fourth Circuit case, Bond v. Blum,
11 where one party in a child custody case took an entire
12 autobiographical manuscript of one of the parties and put it
13 before the Court. It was a different purpose because that was a
14 fact.

15 Now, here's an interesting question, Your Honor.
16 I think the other side has skirted the issue. Let's match our
17 purpose, Public.Resource's purpose, to the plaintiffs' purpose
18 in creating their standards. Was the plaintiffs' purpose to
19 write law? If their purpose was to write law, then we have a
20 similarity of purpose, and if their purpose was to write law,
21 then they're falling into deeper and deeper Veeck and BOCA
22 problems.

23 But if, as they say, oh, but we had all these purposes
24 that had nothing to do with the law, we had best-practices
25 purposes, we had contractor purposes, then the law purposes of

1 Public.Resource are very different, and that's an important
2 point here. They are not competing. These purposes are very,
3 very different.

4 THE COURT: What's the line between transformative and
5 not transformative here? I mean, if you had converted the hard-
6 copy standards to a searchable PDF but had only posted on your
7 website that it was available for free upon request, would that
8 have been transformative?

9 MR. BRIDGES: Your Honor, it's transformative
10 because it is for a different purpose and a different use.
11 The conditions of that use don't affect the issue. It was a
12 different purpose, a different use.

13 THE COURT: If the PDF versions that plaintiffs sold
14 were also searchable -- in other words, if plaintiffs sold a
15 searchable PDF version, is the only transformative aspect of
16 your posted PDF standards the cost, that it's free?

17 MR. BRIDGES: No, Your Honor. I have to say very
18 clearly: different use, different purpose to make the law
19 available.

20 THE COURT: I understand that. I understand that.
21 I'm asking with regard to the transformative-use issue. Putting
22 aside the purpose, if you said you can get this if you ask for
23 it, or if plaintiff also offered what you're offering but it
24 cost money, isn't the law being reported? It's not just
25 reporting the law that you want to do. You want to do reporting

1 the law for free; right? Because the law is free.

2 MR. BRIDGES: Yes. Absolutely.

3 THE COURT: Right.

4 MR. BRIDGES: Because we believe that no private
5 party should be exercising a private monopoly over the law, and
6 it is not just about seeing the law; it is about speaking the
7 law. It is about analyzing the law. It is about critiquing.

8 They said critiques can be transformative. Great.
9 Critiques can be transformative only if you have access to be
10 able to critique them. They're saying you have to pay them to
11 critique them, or you have to maybe go to one or two places in
12 the United States. And by the way, the statistics that AERA
13 gave you about library access --

14 THE COURT: Right. We're running behind.

15 MR. BRIDGES: All right, if I can get back. The point
16 is, part of the purpose here is to facilitate public discourse
17 about the law without people having to pay a toll in order to
18 know what the law is or without having to go to Washington,
19 D.C., to get access or to have to pay them \$49 to know what the
20 law is in order to critique it.

21 There's a very, very important political point here, that
22 there should not be -- in this public-private partnership that
23 they have discussed, there should not be private dominion over
24 public law.

25 THE COURT: And there's a very big, white marble

1 building about two blocks away where you make those political
2 points, not in the district courts.

3 MR. BRIDGES: I know, Your Honor.

4 THE COURT: Aren't you just in the wrong forum for
5 that point?

6 MR. BRIDGES: Absolutely not. This is exactly the
7 right point. This is the right place for the fair-use argument,
8 because Congress set factors precisely for courts to use. It's
9 a flexible doctrine for courts to analyze on a case-by-case
10 basis. That is what § 107 is.

11 It says, "Here you go, courts. Here's the standard. Have
12 at it." And there is a rich, rich jurisprudence of judge-made,
13 fair-use law that is understood to be the proper dominion of the
14 courts. That's why we're talking about fair use. Your point is
15 a different point about the determination of copyrightability.
16 But when it comes to fair use, courts are the very, very center
17 of that focus.

18 I need to talk, though, because you are concerned about
19 some of the substitution effect. Actually, before I get there,
20 I want to get to the second factor, and that is the nature of
21 the copyrighted work.

22 Now, the nature of the copyrighted work, when it is adopted
23 for dissemination by Public.Resource, at this point it is the
24 law. This is not merely -- this is not merely some building
25 best practice. The nature of the work, when it enters into

1 Public.Resource's world, it is the law. It is the fact of law.
2 So Public.Resource is reporting facts, and these are things that
3 had been publicly disseminated to the public. Okay? That
4 actually weighs in favor of fair use, not against fair use.

5 Harper & Row, there was no fair use because a private,
6 nonpublic manuscript was purloined. The Mange case was private
7 wedding pictures that were purloined. The fact that they were
8 publicly available weighs in favor of fair use because there's
9 no preemption of the first publication availability. That
10 weighed on the court in Harper & Row.

11 I must say this, Your Honor: The works that are on PRO's
12 website, Public.Resource's website, almost all of them -- it may
13 be one or three or four out of maybe 250 -- have been superseded
14 for their purposes. They are not the current standards. They
15 are still the law. That's why it matters to Public.Resource.
16 They are still the law, but they are not their current standards.

17 So Public.Resource isn't interested in their standards as
18 standards. Public.Resource is interested in the law. So this
19 is a huge point that the second factor, the nature of the
20 copyrighted work, is in this case -- they are obsolete or
21 obsolescent standards, by their standards, but the nature of the
22 copyrighted work insofar as Public.Resource is interested in it
23 is because it's still the law.

24 THE COURT: But once the 2014 standards become
25 incorporated by reference, you're going to want to put those up

1 as well; right?

2 MR. BRIDGES: Yes. All the same reasons, and for
3 salutary reasons. It's entirely appropriate. I would also like
4 to discuss -- the third factor is the amount and substantiality
5 of the work compared to the original, yet it does turn on what
6 the purpose is.

7 Again, at the beginning of my time I gave the Court five or
8 six cases, most of them from circuit courts, where the entire
9 work was used. That doesn't weigh against fair use when the
10 purpose is to present the law as law.

11 There is no way of saying, well, we'll give you a summary
12 of the law. People don't have to obey a summary. There was one
13 executive -- I've forgotten the company. One prominent executive
14 went to prison for violating a standard that was incorporated by
15 reference. Went to prison. If you're trying to make public
16 what the law is, you have to give the whole thing.

17 Finally, I do want to talk about the fourth factor, which
18 is the effect of the use on the potential market for or value of
19 the copyrighted work, and this is where I think they are saying,
20 oh, look, we're going to lose business. You're concerned that
21 they're going to lose business.

22 First of all, this factor focuses on loss to the copyright
23 value, not losses to other values. The factor must focus on the
24 standards at issue in this case. What's interesting is when
25 they use some experts to try to talk about substitutive effect,

1 for reasons we can just talk about in motions to strike, the
2 experts shot air balls with extraordinary mistakes.

3 For example, Mr. Geisinger for AERA attributes the decline
4 of sale of standards to Public.Resource, missing the fact that
5 the catastrophic decline that he's looking at began a year, year
6 and a half before Public.Resource ever posted anything.

7 As a matter of fact, the sale of the standards appeared
8 to go back up towards the end of the time that Public.Resource
9 had it up there. There is no real evidence of the loss. And
10 when they talk about the harm, they talk about loss of control.
11 They don't have real numbers about any substitution effect.
12 They don't.

13 THE COURT: Well, are you really arguing that it's not
14 rational to conclude that if their standards are available for
15 free for anyone to download off the Internet that people aren't
16 going to buy them? That's a logical conclusion, isn't it?

17 MR. BRIDGES: No, Your Honor. It's a speculative
18 conclusion, exactly the sort of speculative conclusion that the
19 Supreme Court rejected in the Sony Betamax case. The argument
20 that, oh, people are going to stop watching live TV and they're
21 going to stop watching movies because of the Betamax, and the
22 Supreme Court expressly rejected that as speculative.

23 And we have ASTM's president, Mr. Thomas, stating that we
24 have seen no measurable effect from Public.Resource's actions.
25 We have seen no measurable effect, and they have substituted

1 hypothesis, conjecture.

2 The point is, what is expanding is access. Yes, there are
3 accesses to these. That's very good, because that means that
4 more people are seeing, reading, speaking, analyzing the law.
5 More access is a good thing. They have not shown any competent
6 evidence of actual losses, and we have ASTM's president
7 admitting no measurable effect.

8 Your Honor, I think I'd like to say one --

9 THE COURT: You need to make it brief.

10 MR. BRIDGES: -- more thing. That's right.

11 I would like to come back, however -- we've got the four
12 factors in fair use, and it is the Court's province, emphatically
13 the Court's province on fair use. That's why we have all these
14 fair-use cases. People could have argued in all of those cases
15 that Congress could have adjusted copyright law, but Congress
16 has expressly given the courts authority over fair use because
17 it's an equitable case-by-case doctrine.

18 But as Campbell v. Acuff-Rose made clear in the Supreme
19 Court, it's the job of the courts to analyze the four factors in
20 light of the constitutional purpose of copyright, which is to
21 promote the progress of science in the useful arts.

22 To promote the progress of science in the useful arts means,
23 in the case of law, the study of law, the critique of law, and
24 the education about the law, giving full public access to the
25 law and ruling that whatever statutory monopoly they have over

1 their building standards, they do not have a private monopoly
2 over the law. We have this important carve-out. It's a
3 statutory boundary between the rights of the copyright holder
4 and fair use.

5 So we ask Your Honor to look at these factors and to
6 understand that this purpose is a laudable and appropriate
7 purpose. The nature of the work is as factual as it could be.
8 It is the law. Your Honor could rule that it is merged; it is
9 fact. You could rule that there's no copyright at all. But
10 fair use allows a pressure valve here. If the Court is
11 uncomfortable ruling that it's not copyrighted, fair use is
12 exactly how to accommodate the concerns on both sides.

13 Thank you, Your Honor.

14 MR. HUDIS: Your Honor, we did reserve some time for
15 rebuttal. I will take less than five minutes.

16 THE COURT: All right.

17 MR. HUDIS: Your Honor, I'll just take the issues that
18 are of most concern from the presentations from Public.Resource.
19 First, with reference to the BOCA case at page 736, in remanding
20 the case for further argument after reversing the preliminary
21 injunction, the case says, "The rule denying copyright
22 protection to judicial opinions and statutes grew out of a much
23 different set of circumstances than to these technical
24 regulatory codes."

25 All right. As to our standards being off sale for a time,

1 as we discussed, Your Honor, they were still available in
2 thousands of libraries, and if one could not get it from one
3 library, there's an inter-lending program between libraries.

4 Your Honor, Public.Resource is asking this Court to
5 substitute its judgment for the will of Congress. Mr. Bridges
6 spoke about one of the exceptions to copyright. There are a
7 number of exceptions to copyrighting, sections 107 through 121
8 of the Act, and Congress, through all of this, has not seen fit
9 for a special exception to copyright that Public.Resource now
10 would like to introduce.

11 As to the external factors in creativity, in their
12 briefs and in responses to our statement of material facts,
13 Public.Resource has already conceded that we have copyrightable
14 content in our book. The HathiTrust case, the central holding
15 of that case was to guard against entire dissemination essential
16 to the court's decision.

17 Mr. Bridges brings up the fact that HTML and OCR coding
18 were done of the standards. Not in our case. It just went up
19 as a standard graphic PDF.

20 Now, you asked about the dividing line between what is and
21 what is not transformative. Your Honor, if you could look to
22 the Leval article where all of this transformative language
23 originated, cited by the court in Campbell v. Acuff-Rose, it
24 says the mere repackaging and republishing of the original does
25 not pass that test.

1 And finally, as to the alleged obsolescence of our
2 standards, Your Honor, those standards are still valuable today
3 for any test that was promulgated between 1999 and 2014, and
4 those standards are still applicable today. They are still on
5 sale today, and what Public.Resource is doing would endanger our
6 income to further promulgate standards in the future.

7 Thank you, Your Honor.

8 THE COURT: Thank you, Mr. Hudis. All right.

9 MR. KLAUS: Thank you, Your Honor.

10 Mr. Bridges misheard me on fair use, because I did not say
11 there's never been a case in the history of fair use that has
12 not said that the copying of a work -- a work -- would not be
13 fair use.

14 What I did say was that there's never been a case in the
15 history of fair use that has said setting up an entire business
16 of the repeated copying and distribution of entire works would
17 be fair use. And, in fact, the Authors Guild v. Google and
18 Authors Guild v. HathiTrust case made it clear that would not be
19 acceptable.

20 Mr. Bridges also said there's no evidence of actual
21 substitution, actual market harm. I would simply give cites
22 to Your Honor to places in the record. Mr. Berry's declaration,
23 paragraphs 11 through 12, which talk about people disseminating
24 entire PDF copies of the works. Mr. Bridges also said that
25 Public.Resource alone makes the works available in HTML or text-

1 searchable format.

2 In fact, if you look at Mr. Thomas's declaration at
3 paragraph 44, what he says is that they actually make their
4 standards available in text-searchable format. The difference
5 is -- as does my client, NFPA. The difference is that if
6 somebody wants that, that's a different format that they pay the
7 right for.

8 Finally, I'd like to go back to Ms. McSherry's point on the
9 Veeck case. Two things to note about it. One is an entire
10 section of that that talks about the difference between model
11 codes and extrinsic standards. I've discussed why I think the
12 "sole purpose" language, which is the qualifier which the Veeck
13 court, which the defendant is relying on, put on to that
14 distinction.

15 I would also point out that that was in response -- that
16 entire discussion in Veeck was in response to amici filings,
17 not just by anyone, but by my client, by ASHRAE. That was the
18 qualification that the Court put on.

19 Happy to answer any other questions.

20 THE COURT: Thank you.

21 MR. KLAUS: Otherwise, I'll just move on, Your Honor.

22 THE COURT: Thank you, Mr. Klaus.

23 All right. And, again, we are still very much behind, so
24 I'm going to ask, let's be as concise as we can. Who's going to
25 argue on behalf of ASTM on ownership?

1 MR. FEE: Your Honor, I'm Kevin Fee from Morgan Lewis
2 on behalf of ASTM and on behalf of all of the plaintiffs in the
3 ASTM case.

4 THE COURT: All right. Good morning.

5 MR. FEE: Your Honor, Ms. McSherry started off the
6 defendant's presentation by saying the core of this case has
7 always been about whether or not incorporation by reference
8 destroys the copyrights on standards written by private
9 organizations, and we agree.

10 Having said that, plaintiffs understand they have the
11 burden of proving that they own the copyrights in this case, but
12 the defendants have spent over three years trying to concoct
13 arguments about why there are some holes in the ownership here.

14 THE COURT: Well, let me ask you. Does the
15 registration certificate for the *1999 Annual Book of Standards*
16 create the same rebuttable presumption of ownership for D39698
17 and D1217-93(98) as the registration certificates for those
18 specific standards? And I single those two out because they're
19 different from the others. Are those copyrighted individually?
20 Is that in the record somewhere?

21 MR. FEE: No, Your Honor. They're part of a
22 compilation registration for the Book of Standards.

23 THE COURT: Okay.

24 MR. FEE: And, first of all, I want to note that the
25 reason you're probably asking this question is we didn't have an

1 opportunity to address this in our briefing. It was raised in
2 the final brief by Public.Resource. But anticipating that you
3 might have that question, I have the answer here for you.

4 The Book of Standards' collective registration covers all
5 the individual works contained in that collection under a series
6 of cases that have found that where an owner of a collective
7 work also owns the copyright and the constituent parts of that
8 collective work, that the registration for that collective work
9 covers both the collective work and the constituent parts.
10 Just a couple of citations for that.

11 There's the Xoom v. Imageline case. That's 323 F.3d 279
12 from the Fourth Circuit. There's also the Morris v. Business
13 Concepts case, 259 F.3d 65. That's at page 68 for a pinpoint
14 site, Second Circuit, 2001.

15 THE COURT: All right.

16 MR. FEE: So, because the Book of Standards were
17 timely registered within five years of the first publication,
18 then we are entitled to a presumption of ownership and validity
19 with respect to those works as a result of that collective
20 registration.

21 THE COURT: All right.

22 MR. FEE: So getting back to where I was a moment ago,
23 we've gone through three years of litigation in this case now,
24 and Public.Resource still has not been able to come forward with
25 any evidence to rebut the presumption of ownership that we're

1 entitled to from those registrations.

2 The simple fact is they have no evidence that anybody other
3 than the plaintiffs in this case owns these works, and that's
4 particularly important, I think, Your Honor, because there have
5 been literally thousands of participants who have been involved
6 in the creation of these works. And this litigation has been
7 the subject of a lot of publicity in the standards-development
8 community.

9 And despite, I'm sure, the efforts by the defendants,
10 everybody's awareness of these issues, not a single person in
11 the thousands and thousands of participants who have ever been
12 involved in the development of standards for these plaintiffs
13 has been identified by the defendant as saying, you know what,
14 I am the owner and exclusive owner of the copyrights of any of
15 those works.

16 And I think it's also important to note that it isn't good
17 enough for them to poke a hole and then say, oh, you didn't get
18 a perfect assignment from this one person out of the 10 people
19 on this committee.

20 They can't defend their infringement by saying the
21 plaintiffs in this case only owned 80 percent of the copyright
22 interest of the works in issue. They have to prove that
23 plaintiffs owned literally no copyright interest in the
24 standards at issue in order for them to have a defense based on
25 ownership.

1 THE COURT: If I didn't find that you were entitled
2 to the presumption on all the standards, have you sufficiently
3 demonstrated a specific author of each of the six standards has
4 assigned their ownership stake to you?

5 MR. FEE: Well, Your Honor, there's a couple ways we
6 have ownership other than the presumption that arises from this
7 registration. First of all, we submitted evidence from all the
8 plaintiffs in this case that their employees made contributions
9 to these works.

10 There's no dispute that if they made contributions in the
11 course of their employment, then the plaintiffs in this case
12 would own at least that copyright interest as a result of the
13 work for hire doctrine, and as I pointed out before, as long
14 as we own some ownership interest in the copyrights, that's
15 sufficient for us to prevail in this claim.

16 In addition, we have also provided evidence related to
17 assignments as well. Maybe the most clear instance of that is
18 the 2014 National Electrical Code. I believe even the
19 defendants don't contest the validity of the ownership of the
20 NFPA with respect to that code, because there's clear
21 documentation that they agreed to be works for hire and that
22 anything that wasn't a works for hire was assigned.

23 But even with respect to the other works, I know, for
24 example, with respect to ASTM, we identified specific language
25 that were authored by employees of ASHRAE works for hire. And,

1 in addition, we do have assignments from some of the persons who
2 were involved in the development of those works.

3 In particular, I have the declarations of a couple of
4 individuals, Mr. Jennings and Mr. Cummings, I believe his name
5 is, who have identified their role in developing certain of
6 these standards.

7 They've clarified that they understood from the start that
8 those standards were going to be owned exclusively by ASTM, and
9 to the extent there was any complaint about documentation with
10 respect to the assignments, we've confirmed and provided
11 evidence that they did do the click-through assignments that are
12 part of the ASTM renewal of memberships every year which
13 provides that everybody understands that they have assigned all
14 of their copyright interest in any of the works that they were
15 involved in to ASTM.

16 So, because Public.Resource cannot meet its burden of
17 overcoming the presumption of ownership arising from the
18 registrations, they do spend a fair amount of time trying to
19 argue that they're not entitled to a presumption in the first
20 place. They argue that because there was a mistake, supposedly,
21 in the completion of the copyright registration forms that
22 somehow the presumption goes away.

23 But as we pointed out in our briefs, the overwhelming
24 amount of case law stands for a proposition that even if there
25 are mistakes in a registration, that does not affect the

1 plaintiffs' ability to bring the lawsuit or the presumption of
2 validity and ownership that accompany that registration unless
3 two factors are met.

4 First, the mistake has to be material, and secondly, the
5 mistake has to be made with the intent to defraud the copyright
6 office. The defendants in this case cannot be either of those
7 requirements.

8 First of all, identifying the works as works made for hire
9 was not a material mistake because it's undeniable that even if
10 we had identified those works as joint works with us being one
11 of the authors, that the copyright registration would have
12 issued. So we cited a brief in our case on that point exactly
13 where a court found that a work made for hire form from the
14 registration was not materially impacted by the fact that it was
15 really not a work made for hire, but the plaintiff still had an
16 ownership interest in that work.

17 And certainly there's no proof of an intent to defraud the
18 copyright office. In fact, the only evidence with respect to
19 intent on how these forms were filled out was the evidence that
20 ASTM had contacted the copyright office to describe the
21 circumstance and ask the copyright office for guidance as to how
22 to complete these forms. And the copyright office told ASTM
23 that the proper mechanism under these circumstances was to claim
24 a work for hire, so there's neither a material mistake nor an
25 intent to defraud the copyright office.

1 There is one case, I believe from the Third Circuit, that
2 Public.Resource cites for a proposition that fraudulent intent
3 is not required, but even that case does not stand for that
4 proposition.

5 The court sort of left open the question of whether intent
6 in the Third Circuit alone is required to eliminate the
7 presumption of validity and ownership, but it did not decide the
8 issue, because it doesn't have to. All the other cases that
9 have been cited, Your Honor, stand for the proposition that they
10 both have to be material mistakes and made with the intent to
11 defraud.

12 So I think the easiest way to sort of support a factual
13 finding of ownership here, as I mentioned, in addition to the
14 presumption that arises from the registration, is the joint
15 authorship point. A joint work is described or defined in the
16 copyright statute as a work that is prepared by two or more
17 authors with an intention that their contributions be merged
18 into inseparable or interdependent parts of a unitary whole.

19 In this case, there can be no dispute that all the
20 participants in the standards development organizations
21 understood that these works would be combined into a single
22 standard at the end of the day, and Public.Resource does not
23 argue otherwise. So, under the plain meaning of the language
24 under § 101 of the Copyright Act, that's all that's required for
25 a joint work.

1 Public.Resource does try to argue that any copyright or
2 any contributions by the plaintiffs' employees in connection
3 with this matter were not copyrightable, but they provide no
4 evidence for that assertion.

5 There's no description in their brief, for example, as to
6 why the contributions that we've identified that were made by
7 employees with respect to D975 are not protectable or
8 copyrightable. They don't mention any of these standards at all
9 in their briefs, and they have an obligation to overcome the
10 presumption that those are not copyrightable. They just haven't
11 even tried to do so.

12 Now, Public.Resource also tries to get around the joint
13 authorship issue by relying on Aalmuhammed, a Ninth Circuit
14 case, for the proposition that joint authorship requires more
15 than just an intent of all the authors to combine their
16 contributions into a single unitary work, but it also requires
17 an intention at the time of the creation that the parties
18 understand that they will both jointly own the work. But that
19 is certainly not the law in this circuit, and it is not the law
20 according to the United States Supreme Court.

21 In the CCNV case, the D.C. Circuit addressed a very similar
22 issue where there is a dispute between two parties who were
23 involved in the creation of a sculpture. Both parties, at some
24 point in time, filed applications to register, so they certainly
25 didn't have a joint understanding that this work was going to be

1 jointly owned at the time.

2 The D.C. Circuit described those facts, if they remained to
3 be the same after a remand, to be a textbook example of jointly
4 authored works in which the joint authors co-owned the copyright,
5 because one party basically did the sculpture of the person; the
6 other party did the sculpture of a grate. Everybody knew they
7 were going to be put together in a single unitary work, and that
8 was all that was required for there to be joint authorship.

9 Now, that case, of course, did go up to the United States
10 Supreme Court as well, and the Supreme Court agreed with the
11 D.C. Circuit's assessment of the parties' rights under those
12 circumstances. It said that the parties would be joint owners
13 if they prepared the work, intending that their contributions
14 be merged into a separate or interdependent whole, and nothing
15 else. There was no discussion about an intent requirement.

16 Now, I know we're running very short on time, so I'm just
17 going to deal very briefly with assignments. I'm sure when they
18 get up, they're going to tell you somebody didn't sign a form or
19 this language isn't appropriate for this particular form that
20 they're going to show you.

21 The problem that they have, among many, with respect to
22 those arguments is they have the obligation, in light of their
23 presumption of ownership, to show that every single participant
24 who was involved in creating that work did not sign a form that
25 assigned those works to the plaintiffs in this case. I don't

1 know what forms they're going to show you, but in their briefing
2 they certainly have not linked any of the forms that they
3 complained about to any particular works at issue in this case.

4 For example, they haven't come forward and said, here are
5 the authors of D975; let me show you the assignment forms for
6 all those. None of those people signed the forms that were
7 required to be signed in order to assign ownership.

8 The bottom line is, with respect to the ownership, there
9 are no magic words with respect to assignment. The intention of
10 all the parties is clear. These plaintiffs have been publishing
11 these works for over a century in some circumstances, always
12 claiming to be the owner of the copyrights. Nobody has ever
13 come forward and said otherwise. Public.Resource has no
14 evidence of anybody ever claiming ownership, and as a result,
15 they just can't meet their burden with respect to any complaints
16 about assignment.

17 But maybe even more importantly, they don't have the right
18 to raise this argument. The courts have made it clear that you
19 cannot defend your copyright infringement by saying, oh, I
20 infringed a copyright, sure, but it's not the plaintiff's
21 copyright; there's some defect in the assignment that entitles
22 me to copy their works without any consequences.

23 The courts have said that the point of the statute of
24 frauds, a provision essentially of the Copyright Act that
25 requires assigned writing, is to prevent disputes between

1 authors or claimed authors about who owns the rights in the
2 works. That is not what we have here. Public.Resource does not
3 claim to be an author in this case, and as a result doesn't have
4 standing to raise this issue.

5 Courts have -- we've submitted a bunch of cases to
6 Your Honor about this issue that have concluded as I've
7 suggested here, but I think it also makes sense just to think
8 for a second about what this would entail if we're going to do
9 this and allow them to challenge assignments with respect to
10 each of these works.

11 Bear in mind, we have over 200 works in this case.
12 Almost all, if not all, these works involve many, many authors.
13 They would have, I suppose, us have a trial where for each work
14 we say, okay, identify every one of the authors. There may be
15 dozens. For each of those authors, what documents did they
16 sign? For each of those documents that they signed, were they
17 authorized by their employer to sign it? We will be here for
18 years doing trials, and --

19 THE COURT: No, we won't.

20 (Laughter)

21 MR. FEE: I think you got my point.

22 THE COURT: I got your point.

23 MR. FEE: So, unless you have any other questions,
24 Your Honor, that's all I have.

25 THE COURT: Thank you.

1 MR. HUDIS: Your Honor, Jonathan Hudis for the AERA
2 plaintiffs. Hopefully, we'll make up some time here, because on
3 ownership we have a very, very simple case. We have one work.
4 Of the 16 joint committee members of the 1999 standards, 13 of
5 them signed nunc pro tunc work made for hire agreements with the
6 sponsoring organizations.

7 The heirs of two deceased committee members signed
8 posthumous copyright assignments. Those are all attached to
9 Ms. Ernesto's declaration. To Register of Copyrights issued a
10 copyright registration to these standards to AERA in 1999. An
11 ownership of record was corrected by a supplementary copyright
12 registration in the standards to all of the three sponsoring
13 organizations in 2014.

14 Public.Resource has not submitted any evidence to contest
15 these facts of ownership, and in defendant's summary judgment
16 brief, Public.Resource specifically elected not to move for
17 summary judgment on this issue.

18 So we have the registration certificates as prima facie
19 evidence of validity and ownership, we have the work made for
20 hire letters, the two assignments, all of which are of record;
21 and as my colleagues from the ASTM case said, the assignee is
22 not required to have been assigned a copyright by all of the
23 co-owners to have standing to sue. We couldn't find one of the
24 15. Just *poof*. He just could not be found.

25 THE COURT: Mr. Hudis, I think that -- I have zero

1 minutes under the approximate schedule for arguments on
2 Plaintiffs AERA, but if they're not contesting your ownership --

3 MR. HUDIS: Well, let's hear from them.

4 THE COURT: Right. What I want to do is I'll let you
5 get back up if hear that they are contesting your ownership.

6 MR. HUDIS: But like the ASTM plaintiffs said, they
7 don't have standing to assert any problems with our copyright,
8 even if they wanted to. Thank you, Your Honor.

9 THE COURT: All right. Why don't we start with the
10 standing issue.

11 MR. BRIDGES: Thank you, Your Honor. The Supreme
12 Court in Feist said the burden is on the plaintiff to prove
13 ownership of a valid copyright and infringement of the
14 constituent parts of a valid copyright.

15 THE COURT: But isn't that in a case where there are
16 disputed copyright holders? And what of plaintiffs' argument
17 that you don't have standing to challenge their ownership of the
18 copyrights in this case because you're not alleging that you own
19 a competing copyright?

20 MR. BRIDGES: Your Honor, the point is, Feist says
21 the plaintiff has the burden of showing ownership in an
22 infringement case. That was an infringement case. The Supreme
23 Court said the plaintiff has the burden of proof of ownership.

24 Now, they are relying upon a statement in the Copyright Act
25 that says a registration within five years of first publication

1 is prima facie evidence. Doesn't say that a defendant doesn't
2 have standing. It says it's simply prima facie evidence.

3 And by the way, speaking about AERA, AERA is now relying on
4 a 2014 registration, because it acknowledges that the 2009
5 registration was wrong. So the 1999 registration was wrong.
6 So it's not relying on the 1999 registration; it's relying on
7 a 2014 registration. It's not within the five years. No
8 presumption on error.

9 But coming back to your point, the argument that they're
10 basically making is that there's no standing to challenge
11 standing. Standing is an Article III plaintiff burden. It has
12 to show that it owns something. And, yes, it can have a prima
13 facie case from the statute, but the statute doesn't say
14 somebody accused of infringement can't challenge the first Feist
15 factor. That's a red herring.

16 There have been some cases that have said that, where I
17 think they are cases where they're saying somebody's a dirty
18 infringer; I'm going to throw the book at them. That seems to
19 be the approach. It's almost like the fugitive disqualification
20 doctrine or something like that. It doesn't play here. Feist
21 made it clear that plaintiff has the burden.

22 And in every copyright case brought by a U.S. author,
23 there must be a registration. There must be a registration.
24 Otherwise, you don't get into court. So the argument that a
25 registration denies a defendant the ability to defend against

1 the first element of Feist makes no sense, Your Honor.

2 Now I would like to go to the substance here because,
3 frankly, yes, the ownership issues here are a dog's breakfast,
4 Your Honor. They are a complete chaos, and I think it's --

5 THE COURT: Why isn't it enough for the plaintiffs to
6 demonstrate that they have at least one individual who will sign
7 their authorship rights to the plaintiffs in each of the works
8 at issue?

9 MR. BRIDGES: That would be enough to give them
10 standing, and we're not saying they don't have standing. But I
11 would like to direct the Court's attention to a case involving
12 one of the plaintiffs here, National Fire Protection Association.

13 It had standing in its case when it was sued for copyright
14 infringement by another code company. It had standing, it
15 challenged ownership, and the district court, Northern District
16 of Illinois in 2006, when the shoe was on the other foot,
17 acknowledged that when NFPA was the defendant, it made some
18 valid points about problems with the ownership.

19 It said summary judgment would be inappropriate on
20 ownership. It's clear that they don't own everything. There
21 needs to be a trial to sort out what they do and don't own,
22 because what they do and don't own makes a difference to what
23 the alleged infringement is. So I absolutely ask the Court to
24 read International Code Council v. National Fire Protection
25 Association, 2006 Westlaw 850879, Northern District of Illinois,

1 2006.

2 And what's interesting is that Public.Resource is just
3 making the arguments here that National Fire Protection
4 Association made there. Now it's changed its tune. But what's
5 interesting is how many different ways the plaintiffs have
6 changed their tune. If you read their briefs, they are all in
7 on these being joint works. They're joint works. That's where
8 they put all their force.

9 Except that none of their registrations call them joint
10 works. They didn't. And it's a material omission. Why?
11 Because if a work is a joint work, all authors are to be named
12 in the registration. All authors. And they didn't do that.
13 And so the whole joint-works argument that you see now is just
14 thrown up here. It wasn't in the registrations. It's thrown up
15 here because they know they've got severe problems with the
16 assignments.

17 And I've given a copy of this to opposing counsel. I would
18 like to hand this up. This, Your Honor, is a compilation of
19 documents regarding ownership, and we have put a summary -- I'm
20 not asking the first one to be into evidence, but there's a
21 summary on page 1 that you should consider part of our argument
22 that explains the various, different types of documents.

23 THE COURT: Is this in the record?

24 MR. BRIDGES: Tabs 2 through the end are in the
25 record, Your Honor, and they all have the filing stripes.

1 THE COURT: Tab 1 is the summary for --

2 MR. BRIDGES: Tabs 2 through 27.

3 THE COURT: All right.

4 MR. BRIDGES: And, Your Honor, if you look at the
5 summary in tab 1, every one of ASHRAE's supposed assignments are
6 not assignments. They just aren't assignments. If you look at
7 what is in tab 2, that's the document.

8 It says, "I hereby grant ASHRAE the nonexclusive royalty
9 rights, including nonexclusive rights in copyright." And down
10 below, it says "nonexclusive royalty rights."

11 A grant of nonexclusive rights does not convey an
12 assignment. An assignment must convey exclusive rights of the
13 copyright holder. There are no assignment documents from ASHRAE
14 with any assignment language. It's all nonexclusive. So that's
15 the first problem.

16 The second problem is with ASTM. Bear in mind that the
17 latest ASTM standard at issue is 2007, and it admits that it
18 didn't ask for assignments until 2005. And then it later said,
19 well, we sort of got assignments in our membership applications.
20 But before 2008, they have no completed membership forms and
21 therefore no assignments with the exception of one that really
22 doesn't matter.

23 It claims, well, we had an IP policy, but an IP policy is
24 not an assignment. I mean, the copyright law is quite clear in
25 § 204. It says, a transfer of ownership is not valid unless --

1 I mean, it is not valid unless an instrument of conveyance or a
2 note or memorandum of the transfer is in writing and signed by
3 the owner of the rights conveyed or such owner's duly authorized
4 agent. And the cases are clear that when you say on these
5 membership forms, oh, I agree that anything I do will belong to
6 you, that's not an assignment. So that's the ASTM problem.
7 It's a severe problem.

8 Then we get to NFPA, and I will admit that the most recent
9 NFPA standard is better. Okay? It is absolutely better.
10 That's why they amended the complaint to add it to the lawsuit,
11 because it may be the only document at issue in this case where
12 there looks like pretty good ownership. But even there, there's
13 a problem, Your Honor, and this gets a little technical.

14 Now that they claim that everything is joint works from
15 joint owners, what about the fact that some of these joint
16 owners are the U.S. government? That U.S. government employees
17 participate as joint authors?

18 No case has ever dealt with this, Your Honor, and I don't
19 know how to deal with it. But § 105 of the Copyright Act says
20 that U.S. government works are not subject to copyright, and
21 Mr. Klaus explained that those are, where they're prepared by an
22 employee acting in the scope of employment. Now they're saying
23 they've got joint works with a whole bunch of federal employees
24 as joint authors.

25 So this is just a mess. Your Honor, yes. It is a dog's

1 breakfast. It's a mess. Mr. Fee said that. They chose what
2 case to bring. They chose how complicated to make it. They
3 chose how vulnerable a set of standards they would choose.
4 That's their problem. I think, Your Honor, there's no way they
5 get summary judgment on ownership.

6 I'm not necessarily saying that we deserve summary judgment
7 on ownership, but the problem is this is a complete mess. It's
8 a mess of their own creation, and it's a mess caused in part
9 because they've changed their story as to what it is. Some of
10 these things are nonexclusive licenses. Some they claim -- they
11 say in the registration, works made for hire.

12 Well, there's a reason for that, Your Honor, because if
13 it's a works made for hire, then people can't terminate
14 assignments after 35 years the way they can if they're not works
15 made for hire. There's a reason for that strategic point in
16 copyright registrations.

17 They claim, oh, we didn't mean anything wrong, because we
18 were told by the copyright office. Your Honor, somebody reported
19 what somebody said, something that happened years ago with no
20 discussion about, well, what facts did they give the copyright
21 office that caused the copyright office to say to do this?

22 The problem is the whole thing is a mess. What we do know
23 is that NFPA has been entirely hypocritical. We know that
24 everybody has abandoned the very basis of ownership they claimed
25 in their registrations that they don't want us to challenge.

1 It's just -- it's got to be done thoroughly.

2 Unfortunately, ownership is on a work-by-work basis, and I
3 notice that they brought this motion on only -- I think it's
4 nine out of over 250 standards at issue. There's a reason for
5 that. They've cherry-picked their best cases, and even then
6 they've got a problem.

7 And then one thing about joint authorship, they say, well,
8 our staff were joint authors because we sort of helped add a
9 footnote or we helped perfect some language or whatever. It's
10 clear that in a law review -- I don't want to say law review,
11 because it's got its own structure, but if I submit an article
12 to a law review and I own the copyright and the article, the
13 editor at the law review who edits my law review article doesn't
14 become my joint author.

15 Having some editing function isn't an authorial function.
16 And in many of these, the staff were forbidden from being
17 members of the technical committees that actually did the
18 writing, technical committees that had academics, government
19 officials and the like. And Childress v. Taylor out of the
20 Second Circuit makes it clear that an editor is not an author.

21 I know we're running long, so I won't go any further.
22 I would just say, Your Honor, there is no way that they've
23 established ownership to the level that is necessary to get
24 summary judgment for them on this.

25 And I will say this. Now that they claim that it's joint

1 works, the Copyright Act -- and remember, they claim they've got
2 joint works, but they have not identified in any registration
3 all the authors. It is important and it is material, because in
4 the Copyright Act, it provides for the Court to consider
5 bringing in the other owners. I'm not sure the other joint
6 owners here know about this case, and if any one joint owner
7 decides they like Public.Resource, that joint owner has full
8 authority to grant Public.Resource a complete license.

9 So they're saying, oh, we're joint owners with thousands
10 of people. I think ASTM, across all its standards, says it has
11 24,000 people. That's for thousands of standards, not just the
12 standards here. But the point is, the Court has a responsibility
13 to look to make sure the joint owners are protected, because if
14 they are joint owners, they have a fiduciary duty to account
15 their profits to the other joint owners, which is just another
16 reason why it's such a specious argument.

17 And why are they making a specious argument? Because what
18 they said in the registration isn't right, and what they tried
19 to do with the assignments couldn't turn the corner. So that
20 was their third fallback, and it's intellectually dishonest,
21 Your Honor, and should not be countenanced. Thank you.

22 THE COURT: Thank you.

23 MR. FEE: May I have one or two minutes, Your Honor?
24 There was a lot in there.

25 THE COURT: I'd prefer one, but I'll give you two.

1 MR. FEE: First of all, let's just cut to the chase
2 with respect to the notion that it was somehow a material
3 mistake not to list all the individual and joint authors.
4 We cited a case, the Original Appalachian Artworks case, for the
5 proposition that that's not a material mistake. The other side
6 said nothing in their briefs. We've heard nothing about it
7 today.

8 The other notion that I want to correct for Your Honor
9 is this notion that we are only claiming joint authorship.
10 As we point out in the briefs, and as even the court in Veeck
11 identified, organizations like this who are creating standards
12 are the organizational authors of these works, but because they
13 have literally no evidence to rebut the evidence we put in about
14 what particular authors wrote while they were in our employment,
15 that's the simplest way for you to dispel of this non-ownership
16 issue. But we believe that we were the organizational authors,
17 we have joint ownership at a minimum, and we also have
18 assignments from the relevant persons.

19 Again, we didn't see any evidence about assignments that
20 were tied to any of the works in these issues. I don't think
21 this book -- you know, I looked at whatever he pointed you to.
22 You couldn't tell if that person ever made any contribution.

23 That's also, I think, important with respect to the
24 government point he's trying to inject here at the last minute.
25 He's sort of hypothesizing about what contributions, if ever,

1 were made by federal government employees in the course of their
2 employment. Then he's hypothesizing about a potential argument
3 that that somehow affects the copyright interest here. There's
4 no support for any of that in either the case law or in the
5 record.

6 I do want to turn just for one second to this ICC case, as
7 well, that he likes to make a big deal about. The ICC case,
8 first of all, there's two points that I think are important.
9 One is the assignment issues in the ICC case were a little
10 different than the ones that we have here in that there is also
11 a provision that was not raised in the ICC case that is raised
12 in this case as a basis for assignment.

13 And similar language is also available to ASHRAE. If you
14 look at the ASHRAE assignment that Mr. Bridges read to you --
15 I think it was Exhibit 2. So he read one portion of that
16 document to you. But in the section that has the No. 2 next to
17 it, at sort of the end of that, it says, "I understand that I
18 acquire no rights in publication of this standard in which my
19 proposal in this or other similar analogous form is used."

20 So there's a clear disavowal of any ownership right in
21 these forms that was also present in the NFPA forms as well.
22 That, combined with the fact that the NFPA has been claiming
23 ownership for these works for over a century without any
24 objection I think is more than adequate to show that there's an
25 intent to assign, and this document suffices to meet the statute

1 of frauds requirement for the Copyright Act, assuming you even
2 believe that they could raise that issue.

3 Did Your Honor have anything else?

4 THE COURT: No. Thank you.

5 And I'll just say now that, given where we are with time,
6 I'm not going to hear argument on the motion to strike the
7 experts. I can rule on the papers on those unless you think
8 there's something absolutely -- and I apologize if somebody
9 spent a lot of time preparing to argue that; but given where we
10 are, I feel like the briefs have covered that, and I can rule on
11 the papers on that one.

12 Mr. Hudis, did you have something that your learned
13 co-counsel didn't cover?

14 MR. HUDIS: Only what Mr. Bridges just brought up.
15 I'll take a minute. The '99 registration, yes. We are
16 absolutely relying on that. The only thing that was changed
17 from '99 to 2014 was to add the two other co-owners. A mere
18 correction of ownership. We have cited the Billy-Bob v. Novelty
19 case out of the Seventh Circuit, and it says they have no
20 standing to challenge any of this. This was a mere correction
21 of a mistake. It is not a material mistake, and anything that
22 Mr. Bridges says otherwise is just not true.

23 Merely providing comments, by the way, this is something
24 that Mr. Bridges just said that was very surprising to me.
25 Merely providing comments is not authorship. Well, then, we

1 have ownership and validity and authorship all wrapped up in a
2 very nice, neat bow. There's no challenge on anything I heard
3 from Mr. Bridges just now about the ownership of our copyright.
4 Thank you, Your Honor.

5 THE COURT: Thank you, Mr. Hudis.

6 So on the trademark issue from ASTM?

7 MR. FEE: Kevin Fee again, Your Honor. Just one more
8 point, if you don't mind, on the copyright that Mr. Hudis just
9 reminded me of. The evidence with respect to copyright
10 ownership is not that there were just editorial changes made by
11 the parties. We have declarations with respect to ASTM where
12 we've identified entire paragraphs that were written by ASTM
13 employees in the course of their employment. So the notion that
14 we were adding a footnote or changing a comma here and there is
15 just not consistent with the evidence.

16 Now moving on to the trademark issues. Public.Resource,
17 like its ownership story, has done its best to try to complicate
18 this trademark case, which I think is really actually a
19 relatively straightforward trademark case.

20 Public.Resource has used exact copies of plaintiffs' marks
21 on what it claims to be exact replicas of plaintiffs' standards,
22 and it intends the public to believe that the materials that it
23 posted on its website are authentic versions of the standards
24 offered by the plaintiffs, when they simply are not.

25 The fact of the matter is that the plaintiffs in this case

1 have absolutely nothing to do with the electronic files that
2 Public.Resource posted on their website. Plaintiffs had never
3 seen those files before they were posted on the Internet, and
4 plaintiffs exercised no quality control over the files that the
5 defendant posted on the Internet. And it certainly did not
6 authorize Public.Resource to put those files -- sure.

7 The bottom line is, Public.Resource placed plaintiffs'
8 trademarks and logos on knockoff publications that are of an
9 inferior quality to the publications of the plaintiffs, and
10 that is a clear-cut trademark infringement case for which
11 summary judgment is warranted.

12 Now, there is no argument here about whether or not
13 plaintiffs own protectable trademarks. And when an identical
14 trademark is used in connection with identical or very similar
15 products, it is not necessary for Your Honor to even walk
16 through all the likelihood of confusion factors, and we cited
17 numerous cases for that proposition in our briefs.

18 And not surprisingly, Public.Resource doesn't cite a single
19 case where a plaintiff failed to meet its burden with respect to
20 trademark infringement when there is evidence of the exact same
21 mark being used in connection with very similar services when
22 there is an intent to have consumers believe that the source or
23 origin of the defendant's product was the plaintiff.

24 THE COURT: Let me ask you. You argue that the
25 defendant's double-keying method is not as effective as the

1 triple-keying method for guarding against inaccuracies, but as
2 I understand the doctrine, I should be able to look at evidence
3 of your quality control standards to determine that defendant
4 hasn't met them.

5 Did you put in any evidence of your own quality control
6 standards, and if so, where is it in the record?

7 MR. FEE: I believe that if you look in the ASTM one
8 I'm most familiar with, Mr. Tom O'Brien's declaration, there is
9 a description of those quality control methods.

10 THE COURT: All right.

11 MR. FEE: But I would point out that I think
12 the bottom line is that that doesn't really matter in this
13 circumstance except with respect to harm, which you may hear
14 about later.

15 THE COURT: Right.

16 MR. FEE: But whether or not -- you know, they could
17 have done a perfect job complying with our quality control
18 standards. They still don't have the right to steal our
19 trademarks and put it on something we have nothing to do with.

20 Because there's no real good argument for the assertion
21 that you could use the exact same mark on virtually identical
22 products without avoiding infringement, the primary argument
23 that we hear from Public.Resource is that you can't bring a
24 trademark case in this circumstance, and that argument is based
25 entirely on the Supreme Court's decision in Dastar.

1 But the very first sentence of the Dastar opinion starts
2 with Justice Scalia saying that the issue before it was "whether
3 § 43(a) of the Lanham Act prevents the unaccredited copying of a
4 work."

5 That is not the issue in this case. In fact, it's the
6 exact opposite. This is not an unaccredited copying of a work.
7 It is placing a party's trademark on a work that the plaintiff
8 had no involvement in the product that bears its trademark.
9 But the Supreme Court in that case decided that it must assess
10 whether or not § 43(a)(1)(A) of the Lanham Act's use of the term
11 "origin of goods" covered just the person who made the physical
12 good or whether it was the person who created the expression.

13 The Court in that case held that "origin of goods," as that
14 term is used in § 43(a), covers just the physical good at issue
15 and not the person who created the expression that might be
16 embodied in that good, and it reached that conclusion because
17 it wanted to avoid the possibility of there being a perpetual
18 copyright for the expression after the copyright had expired or
19 otherwise gone away.

20 So the Court noted that "The rights of a patentee or a
21 copyright holder are part of a carefully crafted bargain under
22 which, once the copyright monopoly has expired, the public may
23 use the invention or work at will but" -- and this is
24 important -- "without attribution." That is not what happened
25 here.

1 On the other hand, the Supreme Court noted, "A party could
2 face Lanham Act liability for crediting the creator if that
3 should be regarded as implying the creator's sponsorship or
4 approval of the copy." And that's exactly what's happened here.

5 So Dastar actually confirms that a trademark infringement
6 case is possible in this circumstance, not the opposite.

7 But you don't have to take my interpretation of Dastar.
8 We've cited many cases that confirm this is how Dastar's
9 properly interpreted. In the Bock case, the Court held that
10 Dastar stood for the proposition "that the origin of goods
11 provision in 43(a) of the Lanham Act does not contain a cause of
12 action for plagiarism." That's true. If we were complaining
13 about the unattributed copying of our text, then Dastar would
14 bar that claim, assuming we didn't have a copyright infringement
15 claim.

16 On the other hand, the Slep-Tone case that we cited
17 indicated that Dastar suggested that "there would have been a
18 Lanham Act violation where, for example, Dastar had simply
19 copied the television series and sold it as *Crusade* in Europe
20 without changing the title or packaging, including the original
21 credits to Fox.

22 So just like in our case where they don't change the
23 original crediting to the plaintiffs, the Slep-Tone case
24 concluded that a trademark case could be brought in conjunction
25 with a copyright infringement case in that circumstance.

1 Public.Resource really only cites one other case in support
2 of its argument; but that case also involved an attempt to
3 convert a plagiarism case into a trademark infringement claim,
4 and that was the Prunte v. Universal Music Group case.

5 Public.Resource also has tried to defend its conduct under
6 the first sale doctrine, but the first sale doctrine applies
7 only to goods that are being sold when those goods are the
8 genuine product of the plaintiff that are being resold to
9 consumers. The electronic files that are being sold by the
10 defendant in this case were posted, are not the authorized
11 documents that were created by the plaintiffs, and therefore
12 are not subject to the first sale doctrine.

13 Public.Resource had purchased hard-copy materials from
14 the plaintiffs, and if they had wanted to repackage those or
15 do something with the hard copy that they had, that would be
16 covered by the first sale doctrine. But that's not what they've
17 done here.

18 Instead, they've created new documents or electronic files
19 of what they purchased from the plaintiffs and tried to defend
20 that under the first sale doctrine, but the bottom line is that
21 those electronic files were never purchased from the plaintiffs
22 in this case. Making things worse, of course, they're of a
23 lesser quality than the plaintiffs' works.

24 Defendants also try to defend their use of the plaintiffs'
25 trademarks by claiming nominative fair use, but there's three

1 requirements that prove nominative fair use. One is that the
2 use of the plaintiffs' mark is necessary to describe the
3 plaintiff's product. But there's no reason that the plaintiffs
4 need to refer to ASTM if what they're really trying to publish
5 is the law. They could just publish what they call "the law"
6 without reference to ASTM or the other plaintiffs, and that's
7 exactly what happened in the Veeck case. In Veeck, the Fifth
8 Circuit noted that Veeck had just identified the building codes
9 as the law as to relevant towns and not as the model codes
10 themselves, which is what is being done here.

11 The second requirement for non-fair use is that the
12 defendant only use as much of the plaintiffs' trademark as is
13 necessary. It's not necessary, as I just explained, for them to
14 use any of our marks, but it certainly is not necessary for them
15 to use the logos of our clients.

16 There's a long line of cases that we've identified in our
17 brief that stand for the proposition that it's very unusual, if
18 not almost never the case, that you have to actually use a logo
19 as part of a nominative fair use. If they had to use our name
20 at all, they could just call it ASTM Standard D975. They don't
21 need our circle and our symbol there. There's no way to argue
22 otherwise.

23 It's even pointed out and made more clear by the fact that
24 Public.Resource, after the fact now, has started to post some
25 standards not at issue in this case, but other standards of

1 plaintiffs where they don't put the logo on there. So they
2 obviously don't need to have the logo there.

3 The third requirement for nominative fair use is that the
4 defendant not do anything that suggests sponsorship or
5 endorsement by the plaintiffs of the works that are being
6 provided by the defendant. But Public.Resource, the testimony
7 is clear, did everything in its power to try to make the
8 standards that he was posting or that Public.Resource was posting
9 on the website to look exactly like our standards. So there's
10 no basis for the notion that they did anything to avoid a
11 likelihood of confusion in their supposed nominative fair use.

12 The last point I want to touch on real quickly is the
13 notion that some disclaimer is present and that somehow that
14 will eliminate the likelihood of confusion.

15 First of all, it bears noting that the defendant has the
16 burden of proof with respect to showing that a disclaimer will
17 eliminate the likelihood of confusion. The CFE Racing case,
18 793 F.3d 571, from the Sixth Circuit so holds, as does Weight
19 Watchers v. Luigino's, 423 F.3d 137.

20 Public.Resource presented literally no evidence that any
21 disclaimer would be effective in this case. In fact, the truth
22 of the matter is, with respect to the standards at issue in this
23 case, there are no disclaimers at all.

24 You saw the sort of cover sheet you were referring to
25 earlier with the red, white, and blue stripes on there which I

1 think Public.Resource likes to suggest is a disclaimer of some
2 sort, but that disclaimer says nothing about not being affiliated
3 with the plaintiffs in this case or that Public.Resource has
4 authored these materials in any way. After the fact,
5 Public.Resource submitted some evidence of a disclaimer, but it
6 has nothing to do with any of the works in connection with this
7 matter. In any event, a proper disclaimer is not sufficient in
8 this case.

9 As the court in the International Kennel Club case in
10 the Seventh Circuit recognized, quote, "especially where
11 infringement in the case is verbatim copying of plaintiff's
12 name, we are convinced that plaintiff's representation and
13 goodwill should not be rendered forever dependent on the
14 effectiveness of fine-print disclaimers often ignored by
15 consumers."

16 The thing that's most prominent and that tells the
17 consumers in the first instance who is the source of these
18 materials are the logos of the plaintiffs in this case.
19 That's what parties are going to look at when they're trying to
20 figure out who was responsible for these files. If you have some
21 sort of disclaimer on it, it's going to be ignored. That's why
22 courts frequently don't find disclaimers to be sufficient to
23 avoid confusion.

24 Unless Your Honor has any other questions, that's all I
25 have.

1 THE COURT: Thank you.

2 MR. BRIDGES: Thank you, Your Honor. This is
3 Andrew Bridges again for Public.Resource.

4 THE COURT: Mr. Bridges, if the defendant's sole
5 purpose is to disseminate the law, as you say, why do you need
6 to disseminate the plaintiffs' logos?

7 MR. BRIDGES: We don't have to, Your Honor, except
8 that what we've done is, in the spirit of what we understand the
9 incorporation is to be, which is incorporation of particular
10 documents, Public.Resource has replicated the entire document.
11 As is. Now, we need --

12 THE COURT: Well, then you add this certificate; right?

13 MR. BRIDGES: That's right, which emphatically
14 makes the point that it is the law. It doesn't say this is
15 Public.Resource's. We need to be clear. The allegations that
16 Public.Resource is trying to confuse the public about source
17 sponsorship or affiliation of these standards is pretextual and
18 ironic. The fact is, they would sue Public.Resource no matter
19 what. If Public.Resource dropped the logos, they would sue for
20 reverse passing-off, but because it maintained the logos,
21 they're suing for trademark infringement.

22 Let me be clear. Public.Resource would take direction from
23 this Court. Logos: yes or no? It doesn't care. It simply
24 tried to replicate the law which consists of these documents
25 incorporated by reference.

1 Disclaimer. First of all, the Supreme Court in two cases
2 has approved disclaimers. If Public.Resource needs to say --
3 first of all, I'm not sure that the plaintiffs would want their
4 logos taken off because they use their monopoly position to try
5 to make money by associating these standards that have become
6 law with themselves. But if they want the logos off, we will
7 get the logos off, Your Honor. That's not a sticking point.
8 We're just trying to make clear that these are the laws that are
9 in the CFR or state law or whatever. If the Court wants a
10 disclaimer --

11 THE COURT: Well, with regard to disclaimer, if you
12 point to your disclaimers as sufficient to notify consumers that
13 the standards aren't originals, that they're reproductions, I
14 look at the language on the cover page, and it's hard to
15 understand how this -- is this Exhibit 16? -- how this resolves
16 any confusion.

17 MR. BRIDGES: Your Honor, it's not just about this.
18 It's about the entire experience that somebody has going to
19 Public.Resource's website. When I go to the Cornell website, I
20 don't think I'm going to the Library of Congress to get a law.
21 I know I'm going someplace where I can get the law. I've got no
22 confusion between the National Archives and Cornell, but I know
23 that I can go to Cornell to get the law. There is no likelihood
24 of confusion that somebody thinks Public.Resource wrote these.

25 THE COURT: Then why do you have a disclaimer?

1 MR. BRIDGES: We have this document that says this is
2 the law. We have -- and I'm not -- there are different
3 disclaimers at different times, so I'm not clear on exactly what
4 they've all been.

5 THE COURT: Why do you even need this?

6 MR. BRIDGES: We need this to make a political point
7 that this is the law, and we want people to understand that this
8 is no longer just somebody's private standard. This is the law,
9 and that's exactly what it says here. It's giving the citation
10 to the U.S. Code that makes it the law.

11 THE COURT: If all you want to do is to make sure that
12 consumers realize that it is the law, why do you need their logo?

13 MR. BRIDGES: I'm saying, Your Honor, we would drop
14 the logo in a second if that's the Court's direction. The
15 reason we included the logo -- we don't have to have a fight
16 over them with this.

17 THE COURT: Well, they brought a claim.

18 MR. BRIDGES: That's right. They brought a claim, and
19 they would have brought a claim no matter what we did, because
20 it's really a copyright issue.

21 THE COURT: The Court is unconcerned with their
22 motivations for bringing a claim. My only concern is whether
23 they have a valid claim.

24 MR. BRIDGES: Your Honor, if the motivation is to
25 enforce a copyright right, then it's squarely in the middle of

1 Dastar, and that's a problem. That's why the motivation is
2 relevant. If it is to get around a limitation imposed by the
3 Copyright Act, then it's a Dastar problem.

4 But let me make it clear. We're trying -- we don't -- what
5 we want is to continue to make the law available. It doesn't
6 matter if it is with a logo or without a logo. We just want to
7 make the law available. But they would have sued us for
8 dropping the logo as well as for including the logo because they
9 don't want the standards out there. And that's the copyright
10 issue. This is really a copyright case.

11 So if the Court says drop the logos, they would be dropped.
12 If the Court says add a disclaimer that says you have scanned
13 and reformatted these, we would add that disclaimer. If you
14 want to say Public.Resource had no involvement in the creation
15 of these standards, that's fine. Public.Resource has no desire
16 to create any confusion.

17 As a matter of fact, Public.Resource tries to be very clear
18 about what these are. If anything, the plaintiffs want everybody
19 to think you have to buy the law from them, and that's the
20 problem in this case because they're saying they've got an
21 exclusive right to the law and they have the right to control
22 who accesses the law, who makes a derivative work of the law and
23 so forth.

24 So this trademark issue need not be an issue, because
25 Public.Resource isn't trying to make a point about itself other

1 than to be clear about what it's doing. So there is -- we can
2 fight the trademark fight, but we don't need to fight a
3 trademark fight, Your Honor.

4 THE COURT: All right. Thank you, Mr. Bridges.

5 MR. BRIDGES: Thank you.

6 THE COURT: Any discussion of remedies?

7 Good afternoon now.

8 MR. CUNNINGHAM: Good afternoon, Your Honor.

9 Blake Cunningham of King & Spalding. I represent Plaintiff
10 ASHRAE. I'll be speaking on behalf of the ASTM plaintiffs on
11 this topic. I'm mindful of the time, so I'll try to keep this
12 very brief.

13 Now, Your Honor, the Supreme Court counseled, in the
14 eBay v. MercExchange case, that there are four essential factors
15 that should be considered when a court is deciding whether to
16 exercise its discretion to issue a permanent injunction.

17 The first of these factors is whether or not irreparable
18 injury will occur in the absence of an injunction. Now, here
19 it's not disputed that plaintiffs' standards have been accessed
20 thousands of times on defendant's website. It's also not
21 disputed that defendant placed plaintiffs' standards on the
22 Internet Archive website and that they were downloaded thousands
23 of times from that site.

24 That these downloads and accesses would represent some
25 impact on the legitimate market for these works is, as Your

1 Honor noted earlier today, somewhat a matter of common sense.
2 But in this case, we've also backed it up with the expert
3 opinion of Mr. Jarosz, which of course went unrebutted.

4 THE COURT: Let me ask you -- and I don't mean to jump
5 around, but while I have you up here. You've moved to summary
6 judgment as to six standards. At this time, are you still
7 seeking a permanent injunction just as to those six?

8 MR. CUNNINGHAM: So we are seeking a permanent
9 injunction -- I think it was nine standards, Your Honor, that we
10 moved on. So we're seeking a permanent injunction for those
11 nine standards. We're also asking that the Court enjoin future
12 infringement. We've cited a number of cases in our briefs where
13 courts have enjoined future infringement of separate works, and
14 here we think that's especially on topic because Public.Resource
15 -- I think even earlier today Mr. Bridges stated that they plan
16 to keep posting more and more works, and it would not be
17 efficient for any of us if we have to keep coming back and
18 reliving this same case.

19 THE COURT: You seek to cure the copyright
20 infringement broad enough to cure any trademark infringement,
21 as well as -- from what I hear, everybody's willing to be
22 reasonable on this, but --

23 MR. CUNNINGHAM: Yeah. I think an injunction on the
24 copyright infringement would tend to also encompass the
25 trademark issues.

1 THE COURT: And what's your intention regarding your
2 remaining contributory copyright infringement claim?

3 MR. CUNNINGHAM: If we got an injunctive relief that
4 involves taking the standards off the website, I don't think we
5 would intend to keep pressing for any sort of damages or
6 anything on a contributory theory.

7 THE COURT: All right.

8 MR. CUNNINGHAM: So, Your Honor, the kind of question
9 becomes, when looking at the harm here, whether the harm is
10 itself irreparable. Now, courts have looked at this question of
11 what makes harm reparable or irreparable, and the Second Circuit
12 in the Salinger v. Colting case took up this question and said
13 the following:

14 "Harm might be irremediable or irreparable, for many
15 reasons, including that a loss is difficult to replace or
16 difficult to measure, or that it is a loss that one should not
17 be expected to suffer."

18 Now, in this case, I feel like there are at least three
19 reasons why the harm that's suffered would be very difficult to
20 measure and difficult to compensate with monetary damages.

21 The first is, as our expert Mr. Jarosz went into detail on,
22 one of the likely outcomes of this case is that plaintiffs would
23 have to change their business models. If we lose the revenue
24 from selling standards, we may have to switch, for instance, to
25 a business model where we charge people to participate in the

1 standards creation process.

2 Now, our clients feel like that would result in less
3 preferable standards that don't reflect the broad interest that
4 we currently try to reflect in our standards creation. They may
5 also be the result that we would produce less standards, fewer
6 standards. Again, that's a negative outcome for us, but it's
7 one that's particularly hard to quantify.

8 A second reason why damages might be hard to quantify here
9 is that the works are shared without restriction online by the
10 defendant. This leads to an outright loss of control by
11 plaintiffs of their copyrights. The works can be downloaded,
12 printed, and even redistributed by anyone. And Public.Resource
13 notably does not have information on how the works are used
14 after they're downloaded, which means that we can't even know
15 the full extent of the infringement here.

16 Now, this is very much analogous to the 2007 Grokster
17 case which we discuss in the briefing. In that case, the
18 defendant was being sued for marketing a peer-to-peer
19 file-sharing network that facilitated widespread sharing of
20 files, and the Court found irreparable harm because the nature
21 of the defendant's conduct and the redistributable nature of the
22 works rendered the works "particularly vulnerable to continuing
23 infringement on an enormous scale."

24 The Court went on there to say, "When digital works
25 are distributed via the Internet, every downloader who receives

1 one of the copyrighted works is, in turn, capable of also
2 transmitting perfect copies of the works. Accordingly, the
3 process is potentially exponential rather than linear,
4 threatening virtually unstoppable infringement of the copyright."

5 And we feel like we're in the same situation here.
6 Defendant has shared our works without restriction, we have no
7 view into how they're being used down the line, and there's
8 virtually unlimited infringement happening. So it represents an
9 outright loss of control of our copyrighted works.

10 The third thing I wanted to get into in terms of why harm
11 would be incredibly difficult to quantify here is that there's
12 reputational harm. It's not disputed, I think, that our
13 clients, the plaintiffs, have spent decades, if not over a
14 century, building their reputations by producing quality
15 standards. And if these are recreated in ways that include
16 errors, include substantive errors, then that could be
17 potentially damaging to the reputation of our clients.

18 And as Mr. Fee explained in his argument, this is not
19 necessarily a purely theoretical argument. We do believe that
20 Public.Resource's quality control mechanisms have been quite lax
21 and have resulted in some substantive errors. One that I'll
22 provide as an example, in Mr. Pauley's declaration, Mr. Pauley
23 from NFPA described how Public.Resource's OCR process had changed
24 the letter M, which stands for meters, into two letters, I and
25 N, which of course could be an abbreviation for inches.

1 So it's not hard to see that these errors could lead to
2 real substantive changes in the works, and we feel like our
3 clients should not be forced to suffer the kind of reputational
4 damages that come along with these type of errors. And in fact,
5 the law is pretty clear on this. We cited two recent cases from
6 this circuit, the Breaking the Chain case and the Hanley-Wood
7 case that said that where there's a continued threat of
8 infringement that could harm the reputational interest, that
9 that in fact does justify an injunction.

10 Now, defendant, for its part, they can't come up here and
11 tell you that absolutely there is no harm that exists. Instead,
12 they're going to try to shift the dialogue here to say that
13 there's not very much harm or enough harm. They're essentially
14 trying to import a fifth factor into the eBay test and say that
15 there must be a severe harm. But that's not really the standard
16 here, Your Honor. The standard is whether the harm at issue is
17 irreparable, and the bar is much lower than defendants would
18 suggest. I'll refer again to the Grokster case.

19 In that case, the court stated, "Irreparable harm may not
20 be presumed, but in run-of-the-mill copyright litigation, such
21 proof should not be difficult to establish." And then the court
22 went on to explain that loss of market share and reputational
23 harm were prime examples of how that could be established.

24 Similarly, the Second Circuit in Salinger v. Colting
25 speculated that, even after eBay, as an empirical matter, most

1 copyright cases would likely involve some form of irreparable
2 harm. And then the court went on to say, "The historical
3 tendency to issue preliminary injunctions readily in copyright
4 cases may reflect just that." Put simply, the burden is not so
5 high as the defendant suggests when it comes to irreparable
6 harm.

7 The second one of the factors which I'd like to discuss
8 quickly is whether or not there are other remedies available
9 that would be sufficient here. As I've already explained, it
10 would be very hard to quantify what damages would be in this
11 situation, but even if you could do so, I think it's not
12 necessarily contested that defendant has no willingness or
13 ability to pay damages here.

14 In fact, if you look at the briefing, the defendants were
15 silent on this one of the four eBay factors. They essentially
16 conceded it, and there's a reason for that. We've got 257 works
17 at issue in just the ASTM case. Statutory damages in the
18 copyright scenario can be up to \$150,000 per work for the kind
19 of willful infringement that we've got here. So you're looking
20 at tens of millions of dollars in potential damages and a
21 defendant who has very, very limited resources and no ability to
22 pay that. So there are no monetary damages really available
23 here, and that's why we've chosen to bring this case and ask for
24 an injunction.

25 Now, one other thing I'd like to say on that is, because

1 the monetary relief here is really inadequate, if the Court
2 finds for us on the merits, the only prudent thing to do would
3 be to issue an injunction. We can't be in a situation where
4 it's kind of winner takes nothing, where we don't get an
5 injunction or damages, and the damages here aren't available.

6 So if Your Honor did find for us on the merits but didn't
7 find that injunction was warranted, I guess our only option
8 would be to, next time Mr. Malamud posts a standard, actually to
9 sue him again and this time to ask for damages. I don't think
10 that that would be an efficient outcome for the defendants or
11 the plaintiffs or the court.

12 The third factor, Your Honor, to consider under eBay is a
13 balance of the hardships. This is a particularly easy factor
14 here because we have deposition testimony from Mr. Malamud where
15 he essentially admits that there would be no harm to
16 Public.Resource. Mr. Malamud was asked at his deposition:

17 "If Public.Resource was unable to continue to post the
18 standards incorporated by reference on its website, what impact,
19 if any, would that have on Public.Resource's financial ability
20 to survive long-term?"

21 He stated, "Probably none."

22 Mr. Malamud was also asked if he could identify any way in
23 which Public.Resource would be harmed. The only thing he could
24 think of was that there might be potential wasted effort in
25 posting these standards online. But, of course, this wasted

1 effort is legally irrelevant since an infringer cannot claim an
2 equitable interest in its infringing conduct. I would direct
3 the Court to the Fox television case for that proposition.

4 Now, the final of the four factors that I'd like to talk
5 about is the public interest. This has already been covered to
6 some degree in the earlier arguments today, so I won't go into
7 the details other than to say that there is a public interest in
8 promoting the creation of creative works.

9 In this instance, we feel that's especially important since
10 the works here serve the public good. Even Mr. Malamud has
11 admitted that these are important works. He's stated that
12 NFPA's works, quote, "save lives." And we've got the opinions
13 of Mr. Jarosz and in amicus briefs where we've seen that if an
14 injunction doesn't issue here, there's a real fear that the
15 quantity and quality of these works will be diminished.

16 Now, we have to balance that against the public interest
17 that Public.Resource claims that it serves, which is increased
18 access. But I think as we've heard a lot about earlier today,
19 there is really no access issue here. Mr. Malamud is kind of
20 the lone complaining voice when it comes to access to these
21 standards. There's no evidence that anyone who really needed to
22 use these standards has not been afforded access, and we already
23 provide access in our reading rooms.

24 So when you balance these two things, I think it's pretty
25 clear that this factor, as well as the other three factors that

1 we've discussed, weighs in favor of granting an injunction.

2 Thank you, Your Honor.

3 THE COURT: Thank you.

4 MR. HUDIS: Good afternoon, Your Honor. Jonathan
5 Hudis for the AERA plaintiffs. This is on the right to relief.

6 As Mr. Cunningham cited the eBay four factors for
7 entitlement to a permanent injunction, I won't reiterate them
8 for the Court now but just to go through the factors as unique
9 to our plaintiffs in the 14-857 case.

10 As the sponsoring organizations have established the threat
11 of Public.Resource's continuing infringement, they're entitled
12 to an injunction. That's the Green v. Brown case in this Court,
13 DDC 2015. Public.Resource's stated goal and mission is to
14 publicly post standards incorporated by reference into federal
15 and state law. Public.Resource still has an unauthorized
16 copy of the sponsoring organization's standards on its server,
17 as does the Internet Archive.

18 It would be very simple for Public.Resource to repost the
19 1999 standards to Public.Resource's website and to the Internet
20 Archive with little effort. Mr. Malamud further admits that he
21 will strongly consider posting the 2014 standards to the
22 Internet if they are incorporated by reference to law, and that
23 was repeated by Mr. Bridges here today.

24 Thus, absent the issuance of a permanent injunction,
25 Public.Resource will continue to disseminate plaintiffs'

1 standards without authorization.

2 To the factor of irreparable harm, the Court should
3 properly look to the future threat of injury to the sponsoring
4 organizations. Number one is plaintiff's inability to prevent
5 further viral infringement, and we cited, among many cases in
6 our briefing, the Walt Disney and Hanley-Wood cases in this
7 circuit.

8 The damage has already been done with respect to the '99
9 standards that were published for the two years online. The
10 2014 standards were announced in 2011, at which point there was
11 a 27 percent drop in the sales of the 1999 standards. Then in
12 2012, the year that Public.Resources posted the infringing
13 copies of the 1999 standards to the Internet, there was a
14 further 34 percent drop in sales, and then the sales stayed
15 suppressed in 2013.

16 The 1999 standards are used in many graduate courses.
17 The sales to students should have remained constant year after
18 year until the release of the 2014 standards in August of 2014,
19 and that was testified to by Professor Geisinger, both in his
20 declaration and in his deposition.

21 So again, same with the ASTM plaintiffs. The sponsoring
22 organization's inability to measure sales losses due to
23 Public.Resource's acts of infringement and contributory
24 infringement, the funds which otherwise would be used for saving
25 up to underwrite the cost of developing future updated standards

1 would be in jeopardy.

2 There would also be two -- excuse me -- three adverse
3 effects on the quantity and quality of the effort the joint
4 committee selected by the sponsoring organizations put in to
5 creating and updating the standards. If their work can be
6 freely distributed on the Internet immediately upon publication
7 and incorporation by reference --

8 THE COURT: Slow down a little bit, Mr. Hudis.

9 MR. HUDIS: Slowing down -- potential future joint
10 committee members and the sponsoring organizations themselves
11 will lose incentives to update this work.

12 Finally, as to irreparable harm, would be the inability to
13 inform the public that the 1999 standards are no longer the
14 latest version, and the public should purchase the 2014 version
15 instead. This harm to the public would be highly damaging to
16 the sponsoring organizations' collective reputations.

17 The balance of hardships. In contrast to the significant
18 harms to the sponsoring organizations if a permanent injunction
19 is not granted, Public.Resource has no cognizable interest in
20 continuing to infringe our standards and our copyright.

21 As an infringer, Public.Resource cannot complain about its
22 loss of copyright to offering an infringing substitute online,
23 and that's the WPIX case we cite in our briefs. It therefore
24 will suffer no recognizable harm if a permanent injunction is
25 entered.

1 Finally, the public interest, Your Honor. Here the public
2 interest favors entry of an injunction to stop further copyright
3 infringement. The object of copyright law is to promote the
4 store of knowledge available to the public. The Copyright Act
5 accomplishes this by providing a financial incentive to
6 contribute to the store of knowledge.

7 Allowing Public.Resource and others to freely copy the
8 sponsoring organization's standards will detract from the
9 important store of knowledge, recommended best practices for
10 testing, design, and administration available to the public.
11 If plaintiffs do not have continuing incentives to secure
12 copyright protection, those incentives to have updated standards
13 in the future will be lost.

14 Unless Your Honor has any questions, those are my remarks.

15 THE COURT: Thank you.

16 MR. HUDIS: Thank you, Your Honor.

17 MR. BRIDGES: Your Honor, while I think we agree that
18 eBay has stated the facts, one thing eBay also said was success
19 on the merits alone does not justify an injunction. So I think
20 that much is clear. I want to move quickly through the first
21 three factors and focus a bit on the fourth factor.

22 The question as to whether plaintiff has suffered
23 irreparable injury. So ASTM's president conceded, in an
24 internal document, "To date, all of Public.Resource's postings
25 have not had a measurable effect on our finances."

1 So they have relied upon two experts. I'll let the motions
2 to strike speak for themselves, but they are extremely weak, and
3 that's trying to be very charitable. They are not competent
4 evidence. There are no qualifications that are appropriate for
5 them. It's just serving as mouthpieces for things that
6 witnesses should have been saying on their own and
7 cross-examined on, and their methodologies were appalling. And
8 that's what they needed to show actual harm.

9 I want to go back to this point in Mr. Geisinger's report.
10 He completely whiffed on the --

11 THE COURT: What would be an appropriate remedy? If I
12 found for the plaintiffs, what would be an appropriate remedy in
13 your case if there is no irreparable injury for an injunction?
14 I assume you're not going to say, oh, we are able to pay money
15 damages. What would be the appropriate remedy?

16 MR. BRIDGES: I am not able to say, Your Honor,
17 because we feel that the public interest here is huge, and I'll
18 have to address that. If the Court decides the Court is
19 inclined to grant an injunction, then I would suggest that we
20 have a separate round to address details. But it's just not
21 appropriate here, for a variety of reasons.

22 In HathiTrust, the court -- well, that's in hardships.
23 I'll get to that later. But the experts here were their
24 substitute for facts, and their experts did not provide valid
25 bases for claiming irreparable harm.

1 What's interesting is, they sort of concede that, because
2 they move their focus to, well, we've lost control. We've lost
3 control. Well, that's like saying our copyright's been infringed
4 because that's what it means to have a copyright infringed.
5 So they're sort of falling back on what eBay says is not
6 important, not relevant, which is mere success.

7 Then they said, oh, but we would suffer reputational harm
8 because people will mistake our product. Well, that is very
9 fixable, and that's not irreparable at all. I guess it could be
10 repaired with a very, very modest injunction which says, put in
11 a disclaimer and say the standards organizations are not
12 responsible for this transcription. But they worry about that.

13 And it's very curious that they mentioned, oh, the problem
14 of quality standards. There's a reference to Mr. Pauley's
15 declaration, and it's really instructive, Your Honor, because
16 Mr. Pauley highlighted a dangerous error. He said in paragraph
17 54, one passage left out the phrase "cables rated above 2,000
18 volts shall be shielded." That was a major mistake, he said.

19 It was NFPA's mistake. It was an error that NFPA corrected
20 with an erratum. Why did Public.Resource omit it? Because the
21 law of incorporation by reference is very clear. Incorporation
22 by reference applies only to the specific document, and it does
23 not extend to any corrections or revisions.

24 So, in fact, this was not an error on Public.Resource's
25 part; it was an error on ASTM's part. But because

1 Public.Resource is putting out there the very document that is
2 incorporated by reference, it was accurate. NFPA's inaccuracy
3 became the law. And maybe that's important for people to know
4 about, and if so, that's something that Public.Resource shows
5 people: This is what got incorporated, and if it's a mistake
6 that NFPA had to correct, well, then as an incorporated law,
7 it's missing something important. So this is very, very key,
8 and this is actually a reason why Public.Resource's work is good
9 and important, because it's telling people what the law is even
10 when NFPA wants to recast what the law really is.

11 The question of remedies at law are inadequate to
12 compensate for the injury? Well, the presumption is first there
13 has to be a showing of actual injury, and there just hasn't been.
14 There's a nullity to consider whether remedies are inadequate to
15 compensate for the injury when they haven't shown injury, and
16 they like to retreat behind the thing, oh, the damages are
17 unquantifiable.

18 Well, that's what expert -- competent experts would usually
19 do, and they didn't have competent experts here. And we have
20 again the admission from ASTM's president, no measurable effect.
21 The plaintiffs' experts didn't analyze what happened in Veeck.

22 They're saying here that there would be terrible harm if
23 they suffer what actually happened in Veeck, and nobody showed
24 that the standards development organizations had to go out of
25 business or couldn't afford to do standards anymore because

1 Veeck said they had no right to monopolize them. There was
2 a case study that their experts chose not to consider. The
3 methodology just makes my mind explode. So they just don't have
4 evidence on this.

5 Let's go to the balance of hardships, because this is
6 important. Again, it assumes actual injury. The Second Circuit
7 said, when it was discussing hardship for a different purpose --
8 it was a standing question. But the Second Circuit said,
9 "The mere possibility of a future injury, unless it is the cause
10 of some present detriment, does not constitute hardship."

11 So what is the hardship, they say? Well, the hardship is,
12 Your Honor, we've had a business model for a hundred years, and
13 it would be hard for us to change it. Well, antiquity is not a
14 virtue, and antiquity doesn't deserve for its own sake -- the
15 fact that this business model has been here a hundred years
16 doesn't mean that that's what the business model should always
17 be.

18 And their documents -- and this is Exhibit 53 where they
19 talk about the next year at NFPA. This was NFPA's previous
20 president, was talking about the need to change the business
21 model anyway because of technological advances. So asking the
22 Court to defend this business model is not an appropriate factor
23 to take into consideration when their business model has to
24 change anyway, and evolution of business models is natural.

25 You know, there had to be an evolution of business models

1 for the Southern Building Codes Conference after Veeck. Lexis
2 changed West's business model. Google Scholar is changing
3 Lexis's business model. Everybody adapts. PACER has threatened
4 the business model of the courthouse filing and retrieval
5 systems.

6 Business models evolve, and there's no hardship to say, oh,
7 well, our business model may have to evolve. The failure of
8 plaintiffs to exert a monopoly power over the law is not itself
9 a hardship that the Court should take into account.

10 I want to go back again to one of the experts for AERA,
11 Mr. Geisinger. Complete whiff on the ascription of losses
12 because he got the years wrong. He got the years wrong.
13 Public.Resource didn't start posting standards till two years
14 into the catastrophic decline. When an expert has such a bad
15 mistake on the key fact for which he keeps getting cited, it is
16 just not evidence. So the hardship is not there.

17 Let's talk about the hardship to Public.Resource.
18 No, there would be no financial effect on Public.Resource, but
19 Public.Resource has a mission, and that mission is to make the
20 law accessible to every American: poor Americans as well as rich
21 Americans, disabled Americans as well as abled Americans. And
22 one of the things it does is make it possible for all sorts of
23 Americans to do things with the law that bring power to persons
24 to analyze the law, to critique it, to run their data analysis
25 tools on it because of the way they are implemented.

1 There is no other way for Public.Resource to make these
2 public tools available other than by doing what it's doing.
3 So there would be a hardship. Not a financial hardship, but it
4 would be a hardship to the very beneficial mission of
5 Public.Resource.

6 So that takes us to the public interest, and there is a
7 very broad public interest here. Now, I think that the
8 plaintiffs tend to think of their communities as people engaged
9 in building or designing or law enforcement or law making. If
10 you look at all the stakeholders who come together, these are
11 people who are sort of their community. They're not so focused
12 on all the public.

13 I mean, certainly they care about public safety; we grant
14 that. But they're not sort of -- they're not available to
15 people to try to sort of stick their nose in and find out, well,
16 what's going on with the law making here? What's going on with
17 the regulations that apply to my child's school or to my child's
18 safety seat?

19 They require -- for access, by the way, they require -- and
20 I went to the NFPA site. I wanted to see -- I couldn't do it.
21 Because for me to go get that public access, I had to agree to
22 consent to jurisdiction of the states where they're located.
23 I had to enter into a contract, and I had to acknowledge their
24 copyright as a matter of contract in order to have access to
25 their public reading rooms.

1 So the fact that I have to enter into a contract, I have to
2 submit to jurisdiction of a distant court? That's not real
3 public access. That's exactly what they want. It's our
4 control, our control over the law itself, and that is a problem.

5 We have a problem, Your Honor. I'm not sure I want to say
6 it's a problem. It's a controversy right now over the
7 privatization of public functions. We've got private operators
8 of federal prisons and immigration facilities --

9 THE COURT: Keep your argument, though, to the issue
10 of remedies, because we are really running out of time.

11 MR. BRIDGES: But I think the question is, is a remedy
12 at all important? And my point is the public interest would be
13 diserved by an injunction that more allocates to the plaintiffs
14 a private right over controlling access to the law. They have
15 said it's loss of control.

16 They have said they have a power to exclude. That's fine
17 when it's just an ordinary copyrighted work. It's not fine when
18 they are claiming -- and the phrase is in their briefs: loss of
19 control, power to exclude. When they are claiming a power to
20 exclude anybody from the law, for any reason, that is not in the
21 public interest.

22 The public interest is in having no private gatekeepers to
23 the law, because what everyone thinks about emergency managers
24 in Michigan or privatization of parking meters in Chicago,
25 privatizing the law and giving any private party exclusive

1 control and the power to exclude what anybody chooses to do with
2 the law and, oh, maybe it's only \$49. That's still saying, your
3 right to do what you want to do with the law? Pay us \$49, and
4 it's all yours. This is unconscionable, Your Honor.

5 THE COURT: Or go to the library and make a photocopy.

6 MR. BRIDGES: Your honor, I'm not sure that works for
7 someone in Helena, Montana, or Anaconda, Montana. His statement
8 about accessibility in libraries, it doesn't pan out. There is
9 one specific version that is incorporated into law, and that's
10 not -- his statistics were not right about the specific version.
11 And these are not available widely in public libraries. They
12 aren't.

13 One of the interesting things, a Polish graduate student
14 about Polish law asked them and said, I want to quote this
15 standard in my thesis. I want to quote this standard in my
16 thesis, and my thesis will only go to the three people on my
17 thesis committee. And they said, Sorry. You can't. You'll
18 just have to cite to it.

19 This is control. And when it becomes the law, ordinary
20 control of a copyright holder over a copyrighted work, I get
21 that, but not when it becomes the law, Your Honor.

22 THE COURT: Thank you, Mr. Bridges.

23 MR. BRIDGES: Thank you.

24 THE COURT: I have to walk out of this courtroom in
25 three minutes. All right?

1 MR. HUDIS: Real fast.

2 THE COURT: The chief judge is waiting for me, and
3 that's somebody I'm not going to keep waiting.

4 MR. HUDIS: I want to make sure we get this in the
5 record, Your Honor. Dr. Geisinger did not whiff. He got it
6 right on our present harm. It's submitted into the record,
7 paragraphs 24 through 27 of his declaration. He got it right.
8 And Mr. Bridges can pontificate all he wants. We have shown
9 harm. We've shown not only past harm but also likelihood of
10 irreparable future harm. Thank you, Your Honor.

11 THE COURT: All right. Thank you very much.
12 Thank you all for your very hard work and your real effort in
13 presentation and your arguments, which were very well prepared.
14 Thank you.

15 (Proceedings adjourned at 12:57 p.m.)
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CERTIFICATE

I, BRYAN A. WAYNE, Official Court Reporter, certify
that the foregoing pages are a correct transcript from the
record of proceedings in the above-entitled matter.

Bryan A. Wayne
BRYAN A. WAYNE

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

AMERICAN SOCIETY FOR TESTING
AND MATERIALS, *et al.*,

Plaintiffs,

V.

PUBLIC.RESOURCE.ORG, INC.,

Defendant.

AMERICAN EDUCATIONAL
RESEARCH ASSOCIATION, INC. *et al.*,

Plaintiffs,

V.

PUBLIC.RESOURCE.ORG, INC.,

Defendant.

Case No. 13-cv-1215 (TSC)

Case No. 14-cv-0857 (TSC)

MEMORANDUM OPINION

Before the court are motions and cross-motions for summary judgment in two related cases. Because there is significant factual and legal overlap between the two cases, the court issues this consolidated opinion to be filed in both cases.

Plaintiffs American Society for Testing and Materials (“ASTM”), National Fire Protection Association, Inc. (“NFPA”), and American Society of Heating, Refrigerating, and Air-Conditioning Engineers (“ASHRAE”) (collectively “ASTM Plaintiffs”) brought suit against Defendant Public.Resource.org, Inc. (“Public Resource”) under the Copyright Act (17 U.S.C. § 101 *et seq.*) and the Lanham Act (15 U.S.C. § 1051 *et seq.*), alleging copyright infringement and trademark infringement. Plaintiffs American Educational Research Association, Inc.

(“AERA”), American Psychological Association, Inc. (“APA”), and National Council on Measurement in Education, Inc. (“NCME”) (collectively “AERA Plaintiffs”) also brought copyright infringement claims against Public Resource under the Copyright Act. Plaintiffs¹ in both cases seek permanent injunctions barring Defendant from continued display of their works.

Plaintiffs moved for summary judgment, and Defendant filed cross-motions for summary judgment in both cases. The court held a combined oral argument on September 12, 2016 to consider the motions. Upon consideration of the parties’ filings, the numerous amicus briefs, and the arguments presented at the motions hearing, and for the reasons stated herein, the ASTM Plaintiffs’ motion for summary judgment is GRANTED and Defendant’s cross-motion is DENIED. The AERA Plaintiffs’ motion for summary judgment is GRANTED IN PART AND DENIED IN PART, and Defendant’s cross-motion is DENIED.

I. FACTUAL BACKGROUND

A. The Parties

1. ASTM Plaintiffs

ASTM Plaintiffs are not-for-profit organizations that develop private sector codes and standards in order to advance public safety, ensure compatibility across products and services, facilitate training, and spur innovation. (*See* ASTM Pls. Statement of Material Facts (“PSMF”) ¶¶ 9, 13, 14, 86, 87, 129, 130 (ASTM ECF No. 118-2)).² These standards include technical works, product specifications, installation methods, methods for manufacturing or testing materials, safety practices, and other best practices or guidelines. (*Id.* ¶ 1). ASTM has

¹ For simplicity, the court’s use of “Plaintiffs” refers collectively to the ASTM Plaintiffs and AERA Plaintiffs.

² All initial citations to the record in this Opinion will include the docket number as “ASTM ECF” or “AERA ECF.”

developed over 12,000 standards that are used in a wide range of fields, including consumer products, iron and steel products, rubber, paints, plastics, textiles, medical services and devices, electronics, construction, energy, water, and petroleum products, and are the combined efforts of over 23,000 technical members, representing producers, users, consumers, government, and academia. (*Id.* ¶¶ 13, 28, 41). NFPA has developed over 300 standards in the areas of fire, electrical, and building safety, with the goal of reducing the risk of death, injury, and property and economic loss due to fire, electrical, and related hazards. (*Id.* ¶¶ 86, 87, 92). NFPA's most well-known standard is the National Electrical Code, first published in 1897 and most recently in 2014. (*Id.* ¶¶ 93–94). Finally, ASHRAE has published over 100 standards for a variety of construction-related fields, including energy efficiency, indoor air quality, refrigeration, and sustainability. (*Id.* ¶ 130).

2. AERA Plaintiffs

AERA Plaintiffs are not-for-profit organizations that collaboratively develop the Standards for Educational and Psychological Testing, including the 1999 edition at issue in this case (“the 1999 Standards”). (AERA PSMF ¶¶ 1, 5, 13 (AERA ECF No. 60-2)). AERA is a national scientific society whose mission is “to advance knowledge about education, to encourage scholarly inquiry related to education, and to promote the use of research to improve education.” (*Id.* ¶ 2). APA is the world's largest association of psychologists, and its mission is “to advance the creation, communication, and application of psychological knowledge.” (*Id.* ¶ 3). Finally, NCME is a professional organization “for individuals involved in assessment, evaluation, testing, and other aspects of educational measurement.” (*Id.* ¶ 4).

3. Public Resource

Defendant Public Resource is a not-for-profit entity devoted to publicly disseminating

legal information. (ASTM DSMF ¶¶ 1–2 (ASTM ECF No. 120-3); AERA DSMF ¶¶ 1–2 (AERA ECF No. 68-3)). Its mission is “make the law and other government materials more widely available so that people, businesses, and organizations can easily read and discuss [the] laws and the operations of government.” (ASTM DSMF ¶ 2; AERA DSMF ¶ 2). Public Resource has posted government-authored materials on its website, including judicial opinions, Internal Revenue Service records, patent filings, and safety regulations. (ASTM DSMF ¶¶ 3–4; AERA DSMF ¶¶ 3–4). It does not charge fees to view or download the materials on its website. (ASTM DSMF ¶ 5; AERA DSMF ¶ 5).

B. Incorporation by Reference of Industry Standards

In the United States, a complex public-private partnership has developed over the last century in which private industry groups or associations, rather than government agencies, typically develop standards, guidelines, and procedures that set the best practices in a particular industry.³ Applicable standards are used by entities and individuals in order to self-regulate and conform to the best practices of that industry. Professor Peter Strauss has noted that “manufacturing and markets are greatly aided, and consumers offered protection, by the application of uniform industrial standards created independent of law, as means of assuring quality, compatibility, and other highly desired market characteristics.” Peter L. Strauss, *Private Standards Organizations and Public Law*, 22 Wm. & Mary Bill Rts. J. 497, 499 (2013).

³ See U.S. Office of Management and Budget, Revised Circular No. A-119, https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/revised_circular_a-119_as_of_1_22.pdf (“OMB Revised Circular”) at 1 (Jan. 27, 2016) (“The vibrancy and effectiveness of the U.S. standards system in enabling innovation depends on continued private sector leadership and engagement. Our approach—reliance on private sector leadership, supplemented by Federal government contributions to discrete standardization processes as outlined in OMB Circular A-119—remains the primary strategy for government engagement in standards development.”).

Standards are typically developed by standards developing organizations (“SDOs”), like Plaintiffs, who work to develop “voluntary consensus standards,” such as those here. Voluntary consensus standards are the ultimate product of many volunteers and association members from numerous sectors bringing together technical expertise. They are “developed using procedures whose breadth of reach and interactive characteristics resemble governmental rulemaking, with adoption requiring an elaborate process of development, reaching a monitored consensus among those responsible within the SDO.” *Id.* at 501. ASTM Plaintiffs develop their standards using technical committees with representatives from industry, government, consumers, and technical experts. (ASTM PSMF ¶¶ 7, 28, 29, 109, 114, 135). These committees conduct open proceedings, consider comments and suggestions, and provide for appeals, and through subcommittees, draft new standards, which the full committees vote on. (*Id.* ¶¶ 31–37, 109, 136, 139). The AERA Plaintiffs developed the 1999 Standards through a Joint Committee which considered input from the public in a notice-and-comment process. (AERA PSMF ¶¶ 13–16).

Pursuant to 5 U.S.C. § 552, federal agencies may incorporate voluntary consensus standards—as well as, for example, state regulations, government-authored documents, and product service manuals—into federal regulations by reference. *See* Emily S. Bremer, *Incorporation by Reference in an Open-Government Age*, 36 Harv. J.L. & Pub. Pol’y 131, 145–47 (2013) (providing a general overview of the federal government’s incorporation of materials by reference). The federal government’s practice of incorporation by reference of voluntary consensus standards is intended to achieve several goals, including eliminating the cost to the federal government of developing its own standards, encouraging long-term growth for U.S. enterprises, promoting efficiency, competition, and trade, and furthering the reliance upon private sector expertise. *See* OMB Revised Circular, *supra*, at 14.

Section 552(a)(1) provides that “a person may not in any manner be required to resort to, or be adversely affected by, a matter required to be published in the Federal Register and not so published[, but] . . . matter *reasonably available to the class of persons affected thereby* is deemed published in the Federal Register when incorporated by reference therein with the approval of the Director of the Federal Register.” 5 U.S.C. § 552(a)(1) (emphasis added). The Office of the Federal Register (“OFR”) adopted regulations pursuant to § 552(a)(1) in 1982 and issued revised regulations in 2014. *See* Approval Procedures for Incorporation by Reference, 47 Fed. Reg. 34,107 (Aug. 6, 1982) (codified at 1 C.F.R. § 51.1 *et seq.*); 79 Fed. Reg. 66,267 (Nov. 7, 2014). These regulations specify that a “publication is eligible for incorporation by reference” if it is “published data, criteria, standards, specifications, techniques, illustrations, or similar material; and [d]oes not detract from the usefulness of the Federal Register publication system.” 1 C.F.R. § 51.7(a)(2). To determine whether the material is “reasonably available” as required by the statute, OFR will consider “[t]he completeness and ease of handling of the publication” and “[w]hether it is bound, numbered, and organized, as applicable.” *Id.* § 51.7(a)(3). All the standards at issue in this case have been incorporated by reference into federal law. (ASTM DSMF ¶ 22; 34 C.F.R. § 668.146 (incorporating AERA Plaintiffs’ 1999 Standards).

Standards that are incorporated by reference are available in person at the OFR in Washington, DC and/or with the incorporating agency. *See* 1 C.F.R. § 51.3(b)(4). Federal regulations that incorporate standards by reference typically direct interested individuals or entities to location(s) where they may view the incorporated documents in person. For example, the Environmental Protection Agency’s (“EPA”) regulation, 40 C.F.R. § 60.17(a), which incorporates numerous standards at issue here, states that:

Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. § 552(a) and 1 CFR part 51. . . .

All approved material is available for inspection at the EPA Docket Center, Public Reading Room, EPA WJC West, Room 3334, 1301 Constitution Ave. NW, Washington, DC, telephone number 202-566-1744, and is available from the sources listed below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030 or go to http://www.archives.gov/federal-register/code_of_federal_regulations/ibr_locations.html.

The EPA regulation further specifies that, for example, the 206 ASTM standards incorporated by reference by the EPA (some of which are involved in this suit) are “available for purchase from ASTM International, 100 Barr Harbor Drive, P.O. Box CB700, West Conshohocken, Pennsylvania 19428-2959, (800) 262-1373, <http://www.astm.org>.” 40 C.F.R. § 60.17(h). The U.S. Department of Education incorporated the AERA Plaintiffs’ 1999 Standards by reference at 34 C.F.R. § 668.146(b)(6), which states that the standards are:

on file at the Department of Education, Federal Student Aid, room 113E2, 830 First Street, NE, Washington, DC 20002, phone (202) 377-4026, and at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 1-866-272-6272, or to go: <http://www.archives.gov/federal-register/code-of-federal-regulations/ibr-locations.html>. The document may also be obtained from the American Educational Research Association.

ASTM Plaintiffs sell PDF and hard copy versions of their standards, including those that have been incorporated by reference into law. (ASTM PSMF ¶¶ 57, 99, 157). The prices for the standards in this case range from \$25 to \$200. (*Id.* ¶¶ 58, 99, 158). The ASTM Plaintiffs also maintain “reading rooms” on their websites that allow interested parties to view Plaintiffs’ standards that have been incorporated by reference. (*Id.* ¶¶ 63–64, 100, 161). The standards in these reading rooms are “read-only,” meaning they appear as images that may not be printed or downloaded. (*Id.*). AERA Plaintiffs sell hardcopy versions of the 1999 Standards, but do not sell digital or PDF versions. (AERA PSMF ¶¶ 30, 33). The prices for the 1999 Standards have ranged from \$25.95 to \$49.95 per copy, and they were sold continuously from 2000 through 2014, except for a nearly two-year period. (*Id.* ¶¶ 34–35).

C. Plaintiffs' Claims in This Action

1. ASTM et al. v. Public Resource

This case involves 257 of ASTM Plaintiffs' standards that have been incorporated by reference into federal law. (*See* ASTM Compl. Ex. A–C; ASTM DSMF ¶ 22). Defendant admits that it purchased hard copies of each of the standards at issue, scanned them into PDF files, added a cover sheet, and posted them online. (ASTM DSMF ¶¶ 173–74, 177–78; ASTM PSMF ¶¶ 182–87). Defendant re-typed some of ASTM Plaintiffs' standards and posted them online, with text in Hypertext Markup Language (HTML) format and graphics and figures in Mathematics Markup Language and Scalable Vector Graphics formats. (ASTM DSMF ¶¶ 83, 175). The copies posted on Defendant's website all bore ASTM Plaintiffs' trademarks. (ASTM PSMF ¶ 210). Defendant also uploaded the ASTM Plaintiffs' standards to the Internet Archive, a separate independent website. (*Id.* ¶ 185).

The ASTM Plaintiffs allege that their standards are original works protected from copyright infringement, and brought claims of copyright infringement, contributory copyright infringement, trademark infringement, unfair competition and false designation, and trademark infringement under common law. (ASTM Compl. ¶¶ 142–95). Defendant counter-sued, seeking a declaratory judgment that its conduct does not violate copyright law or trademark law. (ASTM Ans. ¶¶ 174–205). Both sides have filed motions for summary judgment.

2. AERA et al. v. Public Resource

This case involves the 1999 Standards, which AERA Plaintiffs have sold since 2000. (AERA PSMF ¶¶ 34–35). In May 2012, Public Resource purchased a paper copy of the 1999 Standards, disassembled it, scanned the pages, created a PDF file, attached a cover sheet, and, without authorization from the AERA Plaintiffs, posted the PDF file to Public Resource's

website and the Internet Archive. (AERA DSMF ¶ 28; AERA PSMF ¶¶ 69–80). Public Resource posted a read-only version of the 1999 Standards to its website, unlike many of the ASTM Plaintiffs’ standards, which had undergone optical character recognition (“OCR”) processing to be text-searchable. (*Id.* ¶ 73). OCR processing uses a machine to recognize letters and words in a PDF and translate them into letters or words that can be searched and used by text-to-speech software for individuals who are blind or visually impaired. (*Id.* ¶¶ 73–75).

Plaintiffs allege that the 1999 Standards are protected original works, and they brought suit claiming copyright infringement and contributory copyright infringement. (AERA Compl. ¶¶ 50–63). Defendant counter-sued seeking a declaratory judgment that its conduct does not violate copyright law or trademark law. (AERA Ans. ¶¶ 116–37). Both sides have moved for summary judgment.

II. LEGAL STANDARD

Summary judgment may be granted if “the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a); *see also Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247–48 (1986) (“[T]he mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no genuine issue of material fact.”) (emphasis in original); *Holcomb v. Powell*, 433 F.3d 889, 895 (D.C. Cir. 2006). Summary judgment may be rendered on a “claim or defense . . . or [a] part of each claim or defense.” Fed. R. Civ. P. 56(a).

“A party asserting that a fact cannot be or is genuinely disputed must support the assertion by . . . citing to particular parts of materials in the record.” Fed. R. Civ. P. 56(c)(1)(A). “A fact is ‘material’ if a dispute over it might affect the outcome of a suit under governing law;

factual disputes that are ‘irrelevant or unnecessary’ do not affect the summary judgment determination. An issue is ‘genuine’ if ‘the evidence is such that a reasonable jury could return a verdict for the nonmoving party.’” *Holcomb*, 433 F.3d at 895 (quoting *Liberty Lobby*, 477 U.S. at 248) (citation omitted). The party seeking summary judgment “bears the heavy burden of establishing that the merits of his case are so clear that expedited action is justified.” *Taxpayers Watchdog, Inc. v. Stanley*, 819 F.2d 294, 297 (D.C. Cir. 1987).

In considering a motion for summary judgment, “[t]he evidence of the non-movant is to be believed, and all justifiable inferences are to be drawn in his favor.” *Liberty Lobby*, 477 U.S. at 255; *see also Mastro v. Potomac Elec. Power Co.*, 447 F.3d 843, 850 (D.C. Cir. 2006) (“We view the evidence in the light most favorable to the nonmoving party and draw all inferences in its favor.”). The nonmoving party’s opposition, however, must consist of more than mere unsupported allegations or denials, and must be supported by affidavits, declarations, or other competent evidence setting forth specific facts showing that there is a genuine issue for trial. *See* Fed. R. Civ. P. 56(c); *Celotex Corp. v. Catrett*, 477 U.S. 317, 324 (1986). The non-movant “is required to provide evidence that would permit a reasonable jury to find [in his favor].” *Laningham v. U.S. Navy*, 813 F.2d 1236, 1242 (D.C. Cir. 1987).

III. ANALYSIS

A. Copyright Infringement

Under the Copyright Act, copyright in a work vests initially in the author(s) of that work. 17 U.S.C. § 201(a). Ownership can be transferred in whole or in part, and the exclusive rights of copyright ownership may also be transferred. *Id.* § 201(d). An owner of a valid copyright has the “exclusive right” to reproduce, distribute, or display the copyrighted works as well as prepare derivative works based upon it. *Id.* § 106(1)–(3), (5). Anyone who violates the exclusive rights

of the copyright owner “is an infringer of the copyright or right of the author, as the case may be.” *Id.* § 501(a). The legal or beneficial owner of that exclusive right may then “institute an action for any infringement.” *Id.* § 501(b). In order to succeed on their copyright infringement claims, the Plaintiffs must prove both ““(1) ownership of a valid copyright, and (2) copying of constituent elements of the work that are original.”” *Stenograph, LLC v. Bossard Assoc., Inc.*, 144 F.3d 96, 99 (D.C. Cir. 1998) (quoting *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 361 (1991)).

1. *Feist* Prong 1: Ownership of a Valid Copyright

a. Ownership

The court must first decide the threshold issue of whether Plaintiffs own the copyrights in part or outright such that they have standing to challenge Defendant’s alleged infringement. The Copyright Act provides that possession of a certificate of registration from the U.S. Copyright Office “made before or within five years after first publication of the work shall constitute prima facie evidence,” creating a rebuttable presumption of ownership of a valid copyright. 17 U.S.C. § 410(c); *see also MOB Music Publ’g. v. Zanzibar on the Waterfront, LLC*, 698 F. Supp. 2d 197, 202 (D.D.C. 2010). If the copyright was registered more than five years after the work was published, then the “evidentiary weight to be accorded . . . shall be within the discretion of the court.” 17 U.S.C. § 410(c).

When a party offers as prima facie evidence a registration certificate for a compilation of individual works that it authored, rather than the registration for a specific individual work, a court may consider this to be similar prima facie evidence of ownership, creating the same rebuttable presumption. *See Xoom, Inc. v. Imageline, Inc.*, 323 F.3d 279, 283-84 (4th Cir. 2003), *abrogated by Reed Elsevier, Inc. v. Muchnick*, 559 U.S. 154 (2010); *Morris v. Business*

Concepts, Inc., 259 F.3d 65, 68 (2d Cir. 2001), *abrogated on other grounds by Muchnick*, 559 U.S. 154 (2010). Moreover, the registration certificate is sufficient prima facie evidence for the individual works within the compilation if the compilation is deemed to be a “single work.” Federal regulations provide that “all copyrightable elements that are otherwise recognizable as self-contained works, that are included in a single unit of publication, and in which the copyright claimant is the same” constitute a “single work,” such that they are validly registered under a single registration certificate 37 C.F.R. § 202.3(b)(4)(A); *Kay Berry, Inc. v. Taylor Gifts, Inc.*, 4221 F.3d 199, 205–06 (3d Cir. 2005); *Yurman Studio, Inc. v. Castaneda*, 591 F. Supp. 2d 471, 483 (S.D.N.Y. 2008).

Once a copyright holder has proffered this prima facie evidence, the alleged infringer “challenging the validity of the copyright has the burden to prove the contrary.” *Hamil Am., Inc. v. GFI, Inc.*, 193 F.3d 92, 98 (2d Cir. 1999); *United Fabrics Int’l, Inc. v. C&J Wear, Inc.*, 630 F.3d 1255, 1257 (9th Cir. 2011) (infringer “has the burden of rebutting the facts set forth in the copyright certificate”). The defendant-infringer might argue that the plaintiff-copyright holder had some defect in the record-keeping submitted to establish ownership. However, this “skips a step,” as the defendant must first “set forth facts that rebut the presumption of validity to which [the plaintiff’s] copyright is entitled” before attacking the sufficiency of a plaintiff’s evidence of ownership. *United Fabrics*, 630 F.3d at 1257. The infringer must use “*other evidence* in the record [to] cast[] doubt on” the validity of the ownership. *Fonar Corp. v. Domenick*, 105 F.3d 99, 104 (2d Cir. 1997) (emphasis in original). The court in *Fonar* noted that defendant-infringers have overcome the presumption of validity with evidence that the work has been copied from the public domain and evidence that the work was non-copyrightable. *Id.* (citing *Folio Impressions, Inc. v. Byer Cal.*, 937 F.2d 759, 763–64 (2d Cir. 1991); *Carol Barnhart, Inc. v. Economy Cover*

Corp., 773 F.2d 411, 414 (2d Cir. 1985)). Parties challenging the validity of copyright registrations must therefore do more than simply point out potential errors in the certificate. *See* 2 Nimmer on Copyright § 7.20(b)(1) (“a misstatement . . . in the registration application, if unaccompanied by fraud, should neither invalidate the copyright nor render the registration certificate incapable of supporting an infringement action”).

The ASTM Plaintiffs produced copyright certificates for each of the nine standards at issue, and each of these certificates list the ASTM Plaintiffs as the authors of the works.⁴ The AERA Plaintiffs also produced the copyright certificates for the 1999 Standards, listing the AERA Plaintiffs as authors.⁵ Two of ASTM’s standards—D86-07 and D975-07—were registered more than five years after they were published. The court accords these the same evidentiary weight as if they had been registered within five years. *See* 17 U.S.C. § 410(c) (court has discretion over evidentiary weight). Moreover, the court finds that the registration certificate for the 1999 Book of Standards sufficiently establishes prima facie evidence of ASTM’s ownership of D396-98 and D1217-93(98). Therefore, the ASTM Plaintiffs and AERA Plaintiffs have established their ownership of the works at issue with prima facie evidence.

⁴ The nine copyright registrations are provided in the record here:

- ASTM: Ex. 1 to O’Brien Decl. (ASTM D86-07) (ASTM ECF No. 118-7, p. 13); Ex. 2 to O’Brien Decl. (ASTM D975-07) (ASTM ECF No. 118-7, p. 16); Ex. 4 to O’Brien Decl. (1999 Annual Book of ASTM Standards) (ASTM ECF No. 118-7, p. 23); Ex. 3 to O’Brien Decl. (listing ASTM D396-98 and ASTM D1217-93(98) as standards included in the 1999 Annual Book of ASTM Standards) (ASTM ECF No. 118-7, pp. 20–21).
- NFPA: Ex. A to Berry Decl. (National Electrical Code, 2011 ed.) (ASTM ECF No. 118-3, p. 6); Ex. B to Berry Decl. (2014 ed.) (ASTM ECF No. 118-3, p. 8).
- ASHRAE: Ex. 3 to Reiniche Decl. (Standard 90.1, 2004 ed.) (ASTM ECF No. 118-10, page 16); Ex. 4 to Reiniche Decl. (2007 ed.) (ASTM ECF No. 118-10, page 19); Ex. 5 to Reiniche Decl. (2010 ed.) (ASTM ECF No. 118-10, page 22).

⁵ Ex. RRR to Levine Decl. (original copyright registration) (AERA ECF No. 60-83); Ex. SSS to Levine Decl. (2014 corrected registration) (AERA ECF No. 60-84).

The burden to offer evidence disproving ownership thus shifts in both cases to Defendant. *See Zanzibar*, 698 F. Supp. 2d at 202; *Roeslin v. District of Columbia*, 921 F. Supp. 793, 797 (D.D.C. 1995) (finding that because the copyright registration listed plaintiff as the author, the “burden is thus on the defendant to establish” that plaintiff was not the author). To rebut the presumption of validity, in both cases Defendant pointed to the fact that the certificates state that the standards were “works for hire”—i.e., that Plaintiffs acquired authorship and ownership rights because their employees or anyone who signed a work-for-hire agreement wrote the standards—and the certificates further state that Plaintiffs are the authors of the “entire text[s],” when Plaintiffs have said that the standards are drafted by hundreds or thousands of volunteer contributors. Defendant contends that the certificates must list all of these hundreds or thousands of authors in order to be accurate, and that the failure to do so is a material error which strips Plaintiffs of the presumption of ownership. However, Defendant offers scant support for this argument.

Moreover, Defendant failed to meet its initial burden, since it did not adduce any additional evidence *disproving* Plaintiffs’ authorship. Instead, Defendant points to weaknesses in the additional evidence that Plaintiffs proffered to establish their ownership, including questioning whether every one of the hundreds of Plaintiffs’ members who contributed to the standards at issue signed an agreement with appropriate language transferring or assigning copyright ownership to Plaintiffs. Because Plaintiffs may have standing to bring this infringement suit even as part owners of the copyrights, it is not clear why Defendant asserts that Plaintiffs must prove outright ownership of their copyrights. Beyond showing that Plaintiffs’ recordkeeping could perhaps be more thorough, Defendant has not identified any evidence that either the ASTM Plaintiffs or AERA Plaintiffs do not own the copyrights of the standards, in

whole or in part. The court therefore concludes that the ASTM Plaintiffs and AERA Plaintiffs are the owners of the copyrights at issue and have standing to bring their claims.⁶

b. Valid Copyrights

Defendant also argues that Plaintiffs do not own “valid” copyrights under *Feist* because the standards either were never copyrightable or lost their copyright protection upon incorporation by reference into federal regulations. Defendant argues that the standards cannot be copyrighted because: (1) they are methods or systems, which are not entitled to protection under 17 U.S.C. § 102(b); (2) the standards are in the public domain as “the law”; and (3) the merger and *scènes à faire* doctrines preclude a finding of infringement.

(i). *Methods or Systems under Copyright Act § 102(b)*

Section 102(b) of the Copyright Act specifies eight types of works that are not protected by copyright: “In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.” 17 U.S.C. § 102(b). Though these eight types of works are not further defined in the statute, the legislative history accompanying the Copyright Act of 1976 offers some starting guidance: “Section 102(b) in no way enlarges or contracts the scope of copyright protection under the present law. Its purpose is to restate, in the context of the new single Federal system of copyright, that the basic dichotomy between expression and idea remains unchanged.” H.R.

⁶ Defendant did not dispute that “ASTM has copyright registrations that cover each of the standards at issue in this litigation” except as to one standard, ASTM D323-58(68). (*See* Def. Statement of Disputed Facts ¶ 70 (ASTM ECF No. 121-3)). Therefore, unless Defendant presents evidence disproving ownership, the court is likely to conclude, based on these copyright registrations, that the ASTM Plaintiffs are the owners of the remaining standards at issue in this litigation, with the exception of D323-58(68). As to this standard, ASTM will need to present additional evidence establishing ownership.

Rep. No. 94-1476, at 57, *reprinted in* 1976 U.S.C.C.A.N. 5659, 5670 (Sept. 3, 1976); S. Rep. No. 94-473 (Nov. 20, 1975); *see also* 1-2A Nimmer on Copyright § 2A.06(a)(1) (summarizing legislative history). The “basic dichotomy” refers to the well-established principle that ideas cannot be copyrighted, but expression of those ideas can be. *See* 1-2A Nimmer on Copyright § 2A.06(a)(2)(b) (a work “is to be denied protection only if that protection would be tantamount to protecting an excluded category (e.g., idea or method of operation) without regard to the fact that the excluded subject matter is expressed or embodied in expression”).

This section of the Copyright Act codifies the Supreme Court’s 1879 decision in *Baker v. Selden*, 101 U.S. 99 (1897), which denied copyright protection for systems, methods, processes, and ideas. *Baker* evaluated a copyright claim by the author of a manual describing “a peculiar system of book-keeping” against a defendant who published a similar guide to book-keeping using “a similar plan so far as results are concerned[,] but mak[ing] a different arrangement of the columns, and us[ing] different headings.” *Id.* at 100. The Court defined the question as “whether the exclusive property in a system of book-keeping can be claimed, under the law or copyright, by means of a book in which that system is explained.” *Id.* at 101. In answering this question, the Court offered as an example that “[t]he copyright of a work on mathematical science cannot give to the author an exclusive right to the methods of operation which he propounds, or to the diagrams which he employs to explain them, so as to prevent an engineer from using them whenever occasion requires.” *Id.* at 103. This distinction between the actual method or system described by a work, which cannot be copyrighted, and the written words describing it, which can, is fundamental to understanding the Copyright Act’s modern limitations to copyright protection in § 102(b).

Defendant primarily argues that the Plaintiffs’ standards are completely devoid of

creative expression and are merely recitations of processes or procedures that a person or entity would follow. Part of this argument appears to rest only on the fact that the names of the ASTM Plaintiffs' standards, and their descriptions or advertisements, include the words "method" and "procedure." *See, e.g.*, ASTM D86-07 Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure, Ex. 6 to Decl. of Thomas O'Brien ("O'Brien Decl.") (ASTM ECF No. 118-7 at 107)); ASTM D1217-93(98) Standard Test Method for Density and Relative Density (Specific Gravity) of Liquids by Bingham Pycnometer, Ex. 9 to O'Brien Decl. (ASTM ECF No. 118-7 at 136). Additionally, the AERA Plaintiffs' Rule 30(b)(6) representative noted that the 1999 Standards "describe procedures, statistical procedures, research procedures . . . how to design a test, how to collect evidence of validity, [and] how to calculate the reliability of tests." (Def. Br. at 32 (citing AERA DSMF ¶ 77)). However, simply calling a work a "procedure" or a "method" does not revoke its copyright protection under the Copyright Act. This argument misunderstands or ignores the expression/idea dichotomy rooted in *Baker* and codified in § 102(b).

Defendant also emphasizes that because the Plaintiffs' standards are highly technical, complex, and precise, and because testimony shows that the ASTM Plaintiffs attempt to create the "best" standards, then the standards are "dictated by utility" or just "discovered facts," and lack any creative expressive content. However, the court rejects the argument that voluntary consensus standards, such as those here, are analogous to a list of ingredients or basic instructions in a recipe, or a series of yoga poses, as in the cases cited by Defendant. Not only is there a vast gulf between the simplicity of an ingredient list and the complexity of the standards,

but, more importantly, the standards plainly contain expressive content.⁷ As one example, ASTM D1217-93 lists under the heading “Significance and Use”: “Although [the standard] is no longer employed extensively for the purpose, this test method is useful whenever accurate densities of pure hydrocarbons or petroleum fractions with boiling points between 90 and 110°C are required.” (ASTM ECF No. 118-7 at 136).

The standards in these cases contain expression that is certainly technical but that still bears markings of creativity. As the Supreme Court instructed in *Feist*, “the requisite level of creativity is extremely low; even a slight amount will suffice. The vast majority of works make the grade quite easily, as they possess some creative spark, ‘no matter how crude, humble or obvious’ it might be.” 499 U.S. at 345 (quoting 1 M. Nimmer & D. Nimmer, Copyright § 1.08(C)(1) (1990)). Moreover, as Defendant conceded, there are many possible forms of expression through which the technical material in the standards could be conveyed, and the volunteer and association members who collectively author the standards “debate wording in the standards.” (Def. Br. at 32 (ASTM ECF No. 121)). Thus, however “humble” or “obvious” Defendant finds the Plaintiffs’ creative choices, the standards still bear at least the “extremely low” amount of creativity required by the Supreme Court. Moreover, the undisputed record evidence also shows that other parties have written different standards on the same exact subject matter as ASTM Plaintiffs’ standards, undermining the argument that the standards are so technical and precise there can be only one possible expression. (ASTM PSMF ¶¶ 38, 133).

Importantly, *Baker* and § 102(b) bar Plaintiffs from attempting to copyright the system or

⁷ Defendant does not request that this court scour the over 1,000 pages of the nine of ASTM Plaintiffs’ standards provided to the court or the over 200 pages of the 1999 Standards, and the court was not provided with copies of the remaining standards. The court declines to engage in such an exercise here.

method *itself*, not the written work explaining or describing that method. Here, the copyright protections held by the Plaintiffs do not prevent any person or entity from using or applying the procedures described in the standards, only from copying their written descriptions of those standards. Defendant presented no evidence that the Plaintiffs have sought to block an entity or person from *using* the procedures described in the standards. In fact, use of the procedures described is the *entire purpose* of such voluntary consensus standards. The court therefore concludes that § 102(b) of the Copyright Act does not preclude these standards from being copyrighted.

(ii). *Loss of Copyright Upon Entering the Public Domain*

A. Federal Law Does Not Bar Copyrightability

At the heart of Defendant's defense is the argument that Plaintiffs' standards lost their copyright protections the instant they were incorporated by reference into federal regulations. There are weighty policy arguments on both sides of this issue, including the need to preserve a vital and complicated public-private partnership between the government and SDOs, and the need for an informed citizenry to have a full understanding of how to comply with the nation's legal requirements. However, this suit is not about access to the law in a broad sense, but instead about the validity of copyrights for these standards under current federal law. Copyright protection is a creature of statute, and as such is the result of careful policy considerations by Congress. In the view of this court, Congress has already passed on the question of revoking copyright protection for standards that have been incorporated by reference into regulations, and any further consideration of the issue must be left to Congress for amendment.

Section 105 of the Copyright Act states that "[c]opyright protection under this title is not available for any work of the United States Government." 17 U.S.C. § 105. The Act defines a

“work of the United States Government” as “a work prepared by an officer or employee of the United States Government as part of that person’s official duties.” *Id.* § 101. These are the only government-related works that outright lack copyright under the law. For other types of works, such as those commissioned by the government or created under government contract by private parties, Congress chose to make case-by-case decisions and leave the determination of whether private copyright should exist to the federal agency that commissioned or contracted for the work. The House Report accompanying the Copyright Act states:

The bill deliberately avoids making any sort of outright, unqualified prohibition against copyright in works prepared under Government contract or grant. There may well be cases where it would be in the public interest to deny copyright in the writings generated by Government research contracts and the like; it can be assumed that, where a Government agency commissions a work for its own use merely as an alternative to having one of its own employees prepare the work, the right to secure a private copyright would be withheld. However, there are almost certainly many other cases where the denial of copyright protection would be unfair or would hamper the production and publication of important works. Where, under the particular circumstances, Congress or the agency involved finds that the need to have a work freely available outweighs the need of the private author to secure copyright, the problem can be dealt with by specific legislation, agency regulations, or contractual restrictions.

H.R. Rep. No. 94-1476, at 5672 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5672.

Defendant argues that Sections 102(b) (no protection for systems or methods) and 105 (no protection for Government-authored works) should be read together to indicate that Congress intended that there be no copyright protections for incorporated standards because, like judicial opinions—which the Supreme Court nearly two hundred years ago determined could not be copyrighted—the standards, once incorporated, are “legal facts” which cannot be copyrighted. *See Wheaton v. Peters*, 33 U.S. 591, 668 (1834) (writing that the Court was “unanimously of the opinion that no reporter has or can have any copyright in the written opinions delivered by this Court”); *Banks v. Manchester*, 128 U.S. 244, 253 (1888) (“The whole work done by the judges

constitutes the authentic exposition and interpretation of the law, which, binding every citizen, is free for publication to all, whether it is a declaration of unwritten law, or an interpretation of a constitution or a statute.”). While these cases form the bedrock for the long-standing principle that works authored by government officials or employees cannot be copyrighted, the cases involved works by actual government officials—i.e., judges—acting in their official capacity, unlike here. That was the principle codified in § 105 of the Copyright Act and restated in the U.S. Copyright Office’s Compendium of Copyright Office Practices § 313.6(c)(2) (3d ed. 2014), which states: “As a matter of longstanding public policy, the U.S. Copyright Office will not register a government edict that has been issued by any state, local, or territorial government, including legislative enactments, judicial decisions, administrative rulings, public ordinances, or similar types of official legal materials.”

Congress was well aware of the potential copyright issue posed by materials incorporated by reference when it crafted Section 105 in 1976. Ten years earlier, Congress had extended to federal agencies the authority to incorporate private works by reference into federal regulations. *See* Pub. L. No. 90-23, § 552, 81 Stat. 54 (1967) (codified at 5 U.S.C. § 552) (providing that “matter reasonably available to the class of persons affected thereby is deemed published in the Federal Register when incorporated by reference therein with the approval of the Director of the Federal Register”). However, in the Copyright Act of 1976, Congress made no mention of these incorporated works in § 105 (no copyright for “any work of the United States Government”) or any other section. As the House Report quoted above indicates, Congress already carefully weighed the competing policy goals of making incorporated works publicly available while also preserving the incentives and protections granted by copyright, and it weighed in favor of preserving the copyright system. *See* H.R. Rep. No. 94-1476, at 60 (1976) (stating that under

§ 105 “use by the Government of a private work would not affect its copyright protection in any way”); *see also M.B. Schnapper v. Foley*, 667 F.2d 102, 109 (D.C. Cir. 1981) (analyzing Copyright Act and holding that “we are reluctant to cabin the discretion of government agencies to arrange ownership and publication rights with private contractors absent some reasonable showing of a congressional desire to do so”).

However, recognizing the importance of public access to works incorporated by reference into federal regulations, Congress still requires that such works be “reasonably available.” 5 U.S.C. § 552(a)(1). Under current federal regulations issued by the Office of the Federal Register in 1982, a privately authored work may be incorporated by reference into an agency’s regulation if it is “reasonably available,” including availability in hard copy at the OFR and/or the incorporating agency. 1 C.F.R. § 51.7(a)(3). Thirteen years later, Congress passed the National Technology Transfer and Advancement Act of 1995 (“NTTAA”) which directed all federal agencies to use privately developed technical voluntary consensus standards. *See* Pub. L. No. 104-113, 110 Stat. 775 (1996). Thus, Congress initially authorized agencies to incorporate works by reference, then excluded these incorporated works from § 105 of the Copyright Act, and, nearly twenty years later, specifically directed agencies to incorporate private works by reference. From 1966 through the present, Congress has remained silent on the question of whether privately authored standards and other works would lose copyright protection upon incorporation by reference. If Congress intended to revoke the copyrights of such standards when it passed the NTTAA, or any time before or since, it surely would have done so expressly. *See Whitman v. Am. Trucking Ass’ns, Inc.*, 531 U.S. 457, 468 (2001) (“Congress . . . does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions—it does not . . . hide elephants in mouseholes.”); *United States v. Fausto*, 484 U.S. 439, 453 (1988)

(“[It] can be strongly presumed that Congress will specifically address language on the statute books that it wishes to change.”). Instead, Congress has chosen to maintain the scheme it created in 1966: that such standards must simply be made reasonably available. *See* 5 U.S.C. § 552(a)(1).

Moreover, Congress has similarly determined that online access to the nation’s laws and regulations need not be provided for no cost. In establishing “a system of online access to the Congressional Record [and] the Federal Register,” Congress authorized the Superintendent of Documents, under the direction of the Director of the Government Publishing Office, to “charge reasonable fees for use of the directory and the system of access.” 44 U.S.C. §§ 4101–02. While citing this statute and noting that the Superintendent has chosen not to charge fees for online access, OFR in its 2013 proposed rulemaking stated that Congress had not made a policy determination that online access to the law must be provided free of charge. *See* Incorporation by Reference, 78 Fed. Reg. 60,784, 60,785 (Oct. 2, 2013). Similarly, OFR recently determined that “reasonably available” under § 552(a)(1) did not mean availability for no cost on the Internet. *See id.* (considering proposed amendments to OFR’s regulations on incorporation by reference and specifically addressing and rejecting the argument that standards incorporated by reference should be posted online for free in order to be reasonably available).

Importantly, there is no evidence that the ASTM Plaintiffs’ standards or the AERA Plaintiffs’ standards are unavailable to the public. In fact, the undisputed record evidence shows that the standards are required to be available in physical form from OFR (*see* 1 C.F.R. § 51.3(b)(4)); are available for purchase from the AERA Plaintiffs in hard copy (AERA PSMF ¶ 34) and from the ASTM Plaintiffs in hard copy and PDFs (*see* ASTM PSMF ¶¶ 57, 99, 157); and are accessible in read-only format for free in ASTM Plaintiffs’ online reading rooms (*see*

ASTM PSMF ¶¶ 64, 100, 161). While Defendant argues that the public requires *greater* access to the standards—in particular, free online access in formats other than read-only—that is a policy judgment best left to Congress. The arguments raised by the parties and by amici highlight important considerations regarding unrestricted access to the texts of laws, regulations, and incorporated materials, as well as the strong need to protect the economic incentives for the further creation of new standards through revenues from the sale of existing standards. This is the policy balancing that Congress is presumed to have already engaged in, and any further changes to the law in light of new technological developments and resulting changes in public expectations of access to information are best addressed by Congress, rather than this court.

B. Due Process Concerns Do Not Bar Copyrightability

Defendant further argues that even if the Copyright Act does not bar copyright protection for incorporated standards, individuals have a due process right to access the text of “the law,” including the standards at issue here. Four Circuit Courts have considered similar arguments regarding copyrighted works incorporated by reference into state and federal regulations. *See Bldg. Officials & Code Admins. v. Code Tech., Inc.*, 628 F.2d 730 (1st Cir. 1980) (“BOCA”) (declining to rule on the question); *CCC Info. Servs., Inc. v. McLean Hunter Mkt. Reports, Inc.*, 44 F.3d 61, 74 (2d Cir. 1994) (upholding copyright in work incorporated by reference); *Cnty. of Suffolk, N.Y. v. First Am. Real Estate Solutions*, 261 F.3d 179 (2d Cir. 2001) (same); *Practice Mgmt. Info. Corp. v. Reports, Inc.*, 121 F.3d 516, 518 (9th Cir. 1997) (same); *Veeck v. S. Bldg. Code Cong. Int’l, Inc.*, 293 F.3d 791, 796 (5th Cir. 2002) (en banc) (holding that incorporation by reference revoked the copyright owner’s copyright protection). The court will briefly describe each of these Circuit decisions.

The question of whether a privately-authored, copyrighted work might lose its copyright

protection after being referenced in a law was first discussed by the First Circuit in *BOCA*. That case involved a nonprofit, BOCA, which authored and copyrighted a model code called the “Basic Building Code.” *See* 628 F.3d at 731-32. Massachusetts adopted a building code based in substantial part on the BOCA Basic Building Code, called the Commonwealth of Massachusetts State Building Code. *Id.* at 732. BOCA sold a printed version of the Massachusetts State Building Code for \$22 a copy, and the state referred any persons interested in obtaining a copy of the code for their own use to BOCA. *Id.* The defendant, Code Tech., Inc., published its own copy of the Massachusetts State Building Code and sold it for \$35 per volume. *Id.* In the subsequent copyright infringement suit, the district court granted BOCA’s request for a preliminary injunction, and the First Circuit reversed, though it reserved judgment on the merits of whether the building code was validly copyrighted. Instead, it noted that “[t]he citizens are the authors of the law, and therefore its owners, regardless of who actually drafts the provisions, because the law derives its authority from the consent of the public, expressed through the democratic process.” *Id.* at 734.

The Second Circuit considered similar issues in two cases. First, in *CCC*, the court considered whether copyright protection for a compilation called the Red Book, which listed used car valuations, was revoked after it was referenced by states as one of several references for car valuation. *See* 44 F.3d at 74. The court rejected the argument that referenced works enter the public domain, stating: “We are not prepared to hold that a state’s reference to a copyrighted work as a legal standard for valuation results in loss of the copyright. While there are indeed policy considerations that support [defendant’s public domain] argument, they are opposed by countervailing considerations.” *Id.* The court then analogized to a state education system assigning copyrighted books as a mandatory part of a school curriculum and noted that under the

public domain logic, these books might lose copyright protection. *Id.*

Second, in *County of Suffolk*, the Second Circuit considered the copyrightability of a county's tax maps. The court looked to *Banks*, in which the Supreme Court held that judicial opinions were not copyrightable, and determined that *Banks* established two premises: (1) that judges' opinions cannot be copyrighted because judges receive their salaries from the public treasury and do not have the economic incentives that copyrights are designed to protect; and (2) there are due process considerations because the "whole work done by the judges constitutes the authentic exposition and interpretation of the law, which, binding every citizen, is free for publication to all." 261 F.3d at 193–94 (citing *Banks v. Manchester*, 128 U.S. 244, 253 (1888)). Building on these premises, the Second Circuit articulated two factors that should guide courts' analysis in these situations: first, "whether the entity or individual who created the work needs an economic incentive to create or has a proprietary interest in creating the work"; and second, "whether the public needs notice of this particular work to have notice of the law." *Id.* at 194 (citing *Practice Management*, 121 F.3d at 518–19; *BOCA*, 628 F.2d at 734–35). With regard to this second factor, the court primarily considered the severity of criminal or civil sanctions associated with failure to adhere to the maps at issue. Finding no serious penalties, it focused on the fact that citizens had "fair warning" of the tax maps from their reference in the tax statute, and there was "no allegation that any individual required to pay the applicable property tax ha[d] any difficulty in obtaining access to either the law or the relevant tax map." *Id.* at 195. Therefore, the maps were entitled to copyright protection.

Like the Second Circuit, the Ninth Circuit in *Practice Management* also decided to preserve the copyright protections in the American Medical Association's ("AMA") publication of medical codes and descriptions which had been incorporated by reference by the U.S. Health

Care Financing Administration (“HCFA”). Under the HCFA’s regulation, parties seeking health insurance reimbursement for Medicare were required to use the codes created and copyrighted by the AMA. *See* 121 F.3d at 518. The Ninth Circuit similarly looked to *Banks* and focused on its premise that there is a due process interest in free access to the law. Like the Second Circuit, the court considered this due process interest and ultimately rejected revoking the AMA’s copyright because “[t]here [was] no evidence that anyone wishing to use the [copyrighted codes] ha[d] any difficulty obtaining access to it.” *Id.* at 519.

Finally, counter to the opinions of other circuits, the Fifth Circuit sitting *en banc* in *Veeck* focused more heavily on the first *Banks* premise regarding economic incentives and held that copyright protection is revoked when a model code is adopted as law by a municipality, stating that “as law, the model codes enter the public domain and are not subject to the copyright holder’s exclusive prerogatives.” 293 F.3d at 793. However, the court carefully distinguished its decision from the facts in the aforementioned cases. It wrote:

[T]he limits of this holding must be explained. Several national standards-writing organizations joined [defendant] as amici out of fear that their copyrights may be vitiated simply by the common practice of governmental entities’ incorporating their standards in laws and regulations. This case does not involve references to extrinsic standards. Instead, it concerns the wholesale adoption of a model code promoted by its author, [defendant], precisely for use as legislation. Caselaw that derives from official incorporation of extrinsic standards is distinguishable in reasoning and result. . . . If a statute refers to the Red Book or to specific school books, the law requires citizens to consult or use a copyrighted work in the process of fulfilling their obligations. The copyrighted works do not ‘become law’ merely because a statute refers to them. . . . Equally important, the referenced works or standards in *CCC* and *Practice Management* were created by private groups for reasons other than incorporation into law. To the extent incentives are relevant to the existence of copyright protection, the authors in these cases deserve incentives. . . . In the case of a model code, on the other hand, the text of the model serves no other purpose than to become law.

Id. at 803–05. The cases before the court, involving some of the same amici referenced in *Veeck*, do not involve model codes adopted verbatim in their entirety into legislation. Instead, the

standards incorporated by reference provide guidelines and procedures that individuals or entities must use or reference in the fulfillment of their legal obligations under federal regulations.

Applying the first premise of *Banks* to the facts here, Defendant argues that Plaintiffs do not require economic incentives to create their standards because they actively lobby and advocate for their standards to be incorporated by reference into regulations, including investing funds on lobbying to that effect. Therefore, Defendant argues, the court should find that Plaintiffs create standards for no purpose other than adoption into law, as the *Veeck* court determined regarding the model code in that case. Here however, the facts indicate that Plaintiffs create standards for a wide range of industries, that the majority of their standards are not incorporated into regulations, and that even those that have been incorporated by reference have undergone updates and revisions to reflect modern use, despite the regulations incorporating past versions. Plaintiffs and supporting amici highlight that without copyright protection for all of their standards, they will face significant difficulty raising the necessary revenue to continue producing high-quality voluntary consensus standards. In its Notice of Proposed Rulemaking, OFR relied on this same argument to ultimately reject a proposal to require free online access to standards in its “reasonably available” determination. 78 Fed. Reg. at 60,785 (“If we required that all materials IBR’d into the CFR be available for free, that requirement would compromise the ability of regulators to rely on voluntary consensus standards, possibly requiring them to create their own standards, which is contrary to the NTTAA and the OMB Circular A-119.”).

As for the second premise of *Banks*, this court finds that, as in the cases before the Second and Ninth Circuits, there is no evidence here that anyone has been denied access to the standards by the ASTM Plaintiffs or AERA Plaintiffs. Instead, Defendant simply argues that the

public should be granted more expansive access.

Therefore, considering the *Banks* holdings and given the existing statutory, regulatory, and judicial framework, this court finds that Plaintiffs' standards have not entered the public domain upon their incorporation by reference into federal regulations and do not lose their copyright protection. This conclusion does not dismiss or diminish the valid public policy concern that citizens benefit from greater access to statutes, regulations, and all materials they must reference in fulfilling their legal obligations. The ability to know, understand, and communicate the law as a broad concept is of paramount importance to the continued success of our democracy. However, changes to the statutory or regulatory framework that reconsider the balancing of interests underlying modern copyright law and incorporation by reference must be made by Congress, not this court.

(iii). *Merger Doctrine*

Defendant asks the court to apply the "merger doctrine" to find that the standards cannot be copyrighted because the expressions in the standards have merged with the law to become facts. Under modern copyright law, there is a well-known dichotomy between "expression," which can generally be copyrighted, and "ideas," which cannot. 4-13 Nimmer on Copyright § 13.03. The merger doctrine has developed to consider those specific situations in which "the idea 'merges' with the expression, such that a given idea is inseparably tied to a particular expression." *Id.* at § 13.03(3). This can occur when there "are so few ways of expressing an idea [that] not even the expression is protected by copyright." *Id.* (quoting *BUC Int'l Corp. v. Int'l Yacht Council Ltd.*, 489 F.3d 1129, 1143 (11th Cir. 2007)).

The parties disagree as to the proper merger doctrine analysis. Defendant argues that upon their incorporation by reference, the standards become "merged" with the "fact" that is the

law. Plaintiffs argue that to determine if an idea and expression have merged, the court should focus on whether there were any other ways of articulating a particular idea when the work was first published, not when it was later incorporated by reference. In essence, the parties disagree as to whether the merger doctrine is a question of copyrightability—meaning the Plaintiffs’ standards might lose copyright protection upon incorporation by reference—or an affirmative defense to copyright infringement—i.e., the allegedly infringing work did not violate copyright because there was no other way to express the content of the work. Plaintiffs argue that the merger doctrine addresses only the question of copyrightability, and so the court’s analysis should focus on whether, at the time the standards were authored, there were no other ways to articulate and arrange such standards. Defendant contends that the standards could not be expressed any other way after incorporation into regulations, and thus its display of the standards was not infringement.

The court declines to resolve this merger doctrine issue, since under either approach, the standards maintain copyright protection. At the time they were authored, there were certainly myriad ways to write and organize the text of the standards, and, for the reasons discussed above, the standards did not lose their copyright protections upon incorporation by reference into federal regulations. Therefore, the merger doctrine neither precludes a finding of copyrightability nor serves as a defense for Defendant.

(iv). *Scènes à Faire Doctrine*

Finally, Defendant points to the *scènes à faire* doctrine, which similarly may be approached as a question of copyrightability or an affirmative defense. The doctrine typically applies to “incidents, characters, or settings which are as a practical matter indispensable, or at least standard, in the treatment of a given topic.” Nimmer § 13.03(4) (quoting *Atari, Inc. v.*

North Am. Philips Consumer Elecs. Corp., 672 F.2d 607, 616 (7th Cir. 1982), *cert. denied*, 459 U.S. 880 (1982)). Nimmer offers examples such as the use of a bar room scene in a film about a broken-hearted lover because, as the name of the doctrine suggests, these are “scenes which must be done.” *Id.* Defendant argues here that Plaintiffs’ standards are entirely “uncopyrightable” because they are “shaped by external factors,” such as the desire to satisfy regulations and laws and to write what Plaintiffs believe to be the most accurate and clear standards. (Tr. of Motions Hearing at 62:15–19 (ASTM ECF No. 173); Def. Br. at 34). However, this doctrine is a poor fit for Defendant’s arguments. In the court’s view, there is a great deal of difference between every detail of the phrasing, explanation, and organization across thousands of pages of standards, which Defendant argues is *entirely* dictated by Plaintiffs’ broad desires for accuracy and clarity, and the inclusion of a generic bar room scene in a romantic drama where the audience expects it. Defendant offers no cases to support its argument that this doctrine bars copyrightability of the standards at issue here, and this court knows of none. The court concludes that the *scènes à faire* doctrine does not act as a bar to the copyrightability of Plaintiffs’ standards and does not serve as a defense for Defendant’s display of the standards

In sum, the court concludes that Plaintiffs own valid copyrights over the standards at issue, and that the copyrights were not stripped upon the incorporation by reference into federal regulations.

2. *Feist* Prong 2: Copying an Original Work

a. Overview

Having established that both the ASTM Plaintiffs and AERA Plaintiffs own valid copyrights in the standards at issue, the second question for the court under *Feist* is whether Public Resource, by scanning and posting online the standards at issue “cop[ied] anything that

was ‘original’ to” the Plaintiffs. *Feist*, 499 U.S. at 361. Copying means exercising any of the exclusive rights that 17 U.S.C. § 106 vests in the owners of a copyright. *See Call of the Wild Movie, LLC v. Does*, 770 F. Supp. 2d 332, 351 (D.D.C. 2011). These rights include the rights of reproduction, distribution, display, and creation of derivative works. *See* 17 U.S.C. § 106(1)–(3), (5). There is no factual dispute that Public Resource reproduced and posted online for display or distribution the standards at issue in this case. Having rejected the application of the merger doctrine or *scènes à faire* doctrine as affirmative defenses, Defendant’s only argument on this second prong is therefore that its copying and posting of the standards was “fair use.”

b. Affirmative Defense of Fair Use

Under the Copyright Act, fair use of a copyrighted work “is not an infringement of copyright.” 17 U.S.C. § 107. Fair use is a defense to a claim of copyright infringement in order to “fulfill copyright’s very purpose, ‘to promote the Progress of Science and useful Arts.’” *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 575 (1994) (quoting U.S. Const. art. I, § 8, cl. 8). The Copyright Act provides that:

In determining whether the use made of a work in any particular case is a fair use, the factors to be considered shall include—

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential market for or value of the copyrighted work.

17 U.S.C. § 107. The statute further lists examples of uses that are “fair use,” including “criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research.” *Id.* The fair use doctrine calls for a “case-by-case analysis,” and the four statutory factors are meant to provide “general guidance,” weighed together “in light of the

purposes of copyright.” *Campbell*, 510 U.S. at 578–79.

(i). *Purpose and Character of Defendant’s Use of the Standards*

With regard to the first factor, the statute itself offers guidance on the types of purposes that might be considered fair use: criticism, commentary, news reporting, teaching, or research. *Id.* § 107. Moreover, the Supreme Court has held that courts should focus on whether the new work “supersede[s] the objects of the creation . . . or instead adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message; [the question], in other words, [is] whether and to what extent the new work is transformative.” *Campbell*, 510 U.S. at 578–79 (internal quotations omitted). Given the constitutional goal of copyright—to promote the development of science and the arts—“the more transformative the new work, the less will be the significance of other factors, like commercialism, that may weigh against a finding of fair use.” *Id.* at 579.

It is undisputed that Public Resource scanned the ASTM Plaintiffs’ standards at issue from their physical hardcopies and converted them to searchable PDFs using OCR processing (ASTM Pls. SUMF ¶ 182) and reproduced some of the standards by re-typing them into HTML format. (ASTM PSMF ¶ 182; ASTM DSMF ¶ 83). Public Resource scanned the AERA Plaintiffs’ 1999 Standards from the physical hard copy and converted them to a PDF file, which it then uploaded to its website for display and distribution. (AERA PSMF ¶¶ 69, 71–73; AERA DSMF ¶ 28). Defendant argues this is transformative in three ways: by providing free access to “the law”; by enabling others to use software to analyze the standards; and by enabling those with visual impairments to use text-to-speech software. The evidence does not support any of these arguments.

Defendant first argues that it has transformed Plaintiffs’ standards by making identical

copies of them and distributing them online for no cost. In Defendant's view, this is transformative because it provides individuals with greater access to "the law." While Defendant argues that its conduct is analogous to those who make copies of copyrighted works in order to comply with legal requirements, Defendant was not actually acting to comply with a particular law—unlike, for example, an individual who makes a photocopy of the standards located at OFR for use on her building project. Instead, Defendant has placed identical copies of Plaintiffs' standards into the online marketplace with no intention to use them itself, but instead to simply offer them for free in competition with Plaintiffs' standards. While Defendant did not earn revenue directly from the display of the standards, its activity still bears "commercial" elements given that it actively engaged in distributing identical standards online in the same consumer market. While this commerciality is not by itself dispositive, it does weigh firmly against fair use. *See Campbell*, 510 U.S. at 594.

Defendant points to *Swatch Group Management Services Ltd. v. Bloomberg L.P.*, 756 F.3d 73, 81 (2d Cir. 2014) in support of its proposition that when a copyrighted document is of great public importance then posting it online may be transformative. However, *Swatch Group* involved the recording of a private conference call about the company's earnings report involving executives and 132 analysts that Bloomberg then distributed to subscribers of its Bloomberg Professional service. *Id.* at 78–79. Given that Swatch Group instructed call participants not to record or broadcast the call, any direct knowledge of what the executives said would be limited to those analysts who participated. *Id.* The facts of *Swatch Group* do not align with those here, where the evidence demonstrates that Plaintiffs' standards are available to anyone for viewing online in ASTM Plaintiffs' reading rooms, at a public library, at the OFR or incorporating agency, or for purchase on Plaintiffs' websites. This court is unwilling to apply

any principles from *Swatch Group* or similar cases to this case, in which the standards are widely available.

Next, Public Resource argues that distributing the duplicate copies online is transformative because, with regard to the ASTM Plaintiffs' standards, Public Resource first altered their formatting through application of OCR or conversion to HTML, which enables software analysis or the use of text-to-speech software, and for AERA Plaintiffs' standards, it scanned the hard copy and distributed a PDF version. The court has little difficulty concluding that these actions are not transformative. *See* 4-13 Nimmer on Copyright § 13.05(1)(b); *Nihon Keizai Shimbun, Inc. v. Comline Bus. Data, Inc.*, 166 F.3d 65, 72 (2d Cir. 1999) (holding that a translation is not a transformative, expressive work); *Soc'y of the Transfiguration Monastery, Inc. v. Gregory*, 685 F. Supp. 2d 217, 227 (D. Mass. 2010), *affirmed*, 689 F.3d 29, 59-65 (1st Cir. 2012) ("A simple repackaging of a work in a new format, whether on the Internet or on a CD-ROM or on a flash drive, is not transformative when the result is simply a mirror image reflected on a new mirror."); *see also Authors Guild v. Google, Inc.*, 804 F.3d 202, 207, 217 (2d Cir. 2015) (reasoning Google's scanning and posting of snippets of copyrighted books online was fair use because it made "available information *about* Plaintiffs' books without providing the public with a substantial substitute for matter protected by the Plaintiffs' copyright interests in the original works or derivatives of them" and added "important value to the basic transformative search function, which tells only whether and how often the searched term appears in the book") (emphasis added); *Authors Guild, Inc. v. HathiTrust*, 755 F.3d 87, 90 (2d Cir. 2014) (text searching modification was transformative but where full work was not displayed).

Here, Defendant does not actually perform any analysis on the standards, nor does it offer

the service of providing them in an accessible way to those visual impairments. Instead, Defendant has identified a series of events that must occur, involving intervening third parties and the use of one or more additional software programs, in order for there to be a potentially “transformative” use for individuals who are blind or have visual impairments. Defendant in both cases proffered the expert report of James Fruchterman, who opined on accessibility of written materials for those who are blind. In Fruchterman’s AERA report, he wrote that to make a hard copy accessible for those with visual impairments, he would scan the pages, process them with OCR to convert the read-only images to searchable text, create a Microsoft Word file, and then have it proofread because OCR can create numerous errors. (Expert Rep. of James R. Fruchterman at 8 (AERA ECF No. 70-50)). Once such a version is then uploaded online, an individual who is blind or visually impaired would then need to use additional screen reader software, which “is a program that runs on a personal computer or a smartphone that reads the information on the screen aloud (using a computer-synthesized voice) to a blind person.” (*Id.* at 3–4). While “most blind people themselves do not have the ability to convert books[,] [s]ome blind people have their own home scanners, and if they purchased a used copy online, would be able to scan the 1999 Standards page by page on a home scanner, which would take at least two hours of labor, and then perform optical character recognition on the title.” (*Id.* at 8). In his ASTM report, Fruchterman wrote that he was able to use a screen reader program to read the text of the ASTM Plaintiffs’ standards aloud on Defendant’s website, but not in ASTM Plaintiffs’ reading rooms. (Ex. 96 to Becker Decl., Expert Rep. of James R. Fruchterman at 5–7 (ECF No. 122-6)). Fruchterman noted that some of the PDFs on Defendant’s website were read-only images, such as those on ASTM Plaintiffs’ reading rooms, which had to be copied and pasted into a Microsoft Word document in order for a screen reader program to operate. (*Id.* at 16–17).

He also noted that individuals who are blind may “independently perform optical character recognition on image-based PDFs themselves and access the text that way, and many advanced computer users that are blind would be aware that this is possible.” (*Id.* at 17). He did not opine on whether OCR could be performed on the PDFs of standards that ASTM Plaintiffs sell or whether he attempted to investigate that as part of his research.

While it appears Defendant may enable blind individuals, like all other individuals, to access the standards at no cost, they still may have to take additional steps like OCR processing or converting to a different file type, as well as using additional screen reader programs in order to access the standards. There is no evidence that this would not be possible with Plaintiffs’ PDFs or by scanning Plaintiffs’ hard copy standards. In Defendant’s view, taking the first step or two towards making the standards entirely accessible to those with visual impairments is enough to have transformed the standards. This attempts to stretch logic, and certainly the doctrine of fair use, too far. Defendant has not offered a sufficiently new purpose to render the use transformative, and this weighs against a finding of fair use.

(ii). *Nature of the Copyrighted Standards*

The Supreme Court in *Campbell* instructs that courts should analyze the nature of the copyrighted work with “recognition that some works are closer to the core of intended copyright protection than others, with the consequence that fair use is more difficult to establish when the former works are copied.” 510 U.S. at 586. Many cases create a spectrum between creative, fictional expression and factual expression, with the former being “more” protected. *See* 4-13 Nimmer § 13.05(A)(2). Defendant argues that Plaintiffs’ standards are “factual,” both because they are highly technical and because they are “the law.” However, the Constitution explicitly states that copyright exists to “advance the progress of science and the useful arts.” U.S. Const.

art. I, § 8, cl. 8. That Plaintiffs’ works involve technical scientific concepts and guidelines does not push it away from the core of intended copyright protection, but actually brings it closer. Plaintiffs’ standards are vital to the advancement of scientific progress in the U.S. and exactly the type of expressive work that warrants full protection under the Constitution and the Copyright Act.

(iii). Amount and Substantiality of the Portions Defendant Used

The third factor, “the amount and substantiality of the portion used in relation to the copyrighted work as a whole,” 17 U.S.C. § 107(3), weighs overwhelmingly in Plaintiffs’ favor and against a finding of fair use. It is undisputed that Defendant copied and distributed identical versions of the Plaintiffs’ standards in their entirety. To support its actions as fair use under this third factor, Public Resource argues that it was necessary to do so because the full text of the standards were incorporated into “the law.” However true it may be that individuals wishing to read the text of standards incorporated by reference would want to read them in their entirety, this argument is unpersuasive in the fair use analysis. Any market competitor wishing to copy a rival’s work and distribute it itself could argue that it “needs” to copy the entire work, otherwise its distribution would be less successful. Unsurprisingly, Defendant cannot point to a single case that supports its view, and the court finds that this factor also weighs strongly against a finding of fair use.

(iv). Effect of Defendant’s Use Upon Potential Market or Value

The fourth factor, “the effect of the use upon the potential market for or value of the copyrighted work,” 17 U.S.C. § 107(4), “poses the issue of whether unrestricted and widespread conduct of the sort engaged in by the defendant would . . . result in a substantially adverse impact on the potential market for, or value of, the plaintiff’s present work,” 4-13 Nimmer on

Copyright § 13.05(A)(4); *Campbell*, 510 U.S. at 589 (quoting *Nimmer*). Moreover, the analysis “must take into account not only of harm to the original but also of harm to the market for derivative works.” *Campbell*, 510 U.S. at 589 (quoting *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 568 (1985)). When Defendant engages in “mere duplication for commercial purposes,” as here, a harm to the potential market for the copyrighted works may be inferred. *See id.* at 590–91. Such an inference is intuitive based on the facts here where consumers in the online marketplace are currently presented with the option to purchase a PDF or hard copy version of Plaintiffs’ standards directly from them, or may download a PDF of an identical standard for no cost. The only logical conclusion is that this choice negatively impacts the potential market for Plaintiffs’ standards.

In *Campbell*, the Supreme Court noted that “[s]ince fair use is an affirmative defense, its proponent would have difficulty carrying the burden of demonstrating fair use without favorable evidence about relevant markets.” 510 U.S. at 590. Here, Defendant did not offer expert evidence on the economic impact on the markets, instead pointing to testimony by Plaintiffs’ executives that they did not track or know of negative impacts thus far on their revenue from Defendant’s conduct. This is not enough to overcome the logical presumption that such activity, particularly if it became more widespread by others in the marketplace, would impact Plaintiffs’ revenues. It is not Plaintiffs’ burden to establish that they *have* been harmed in the market, but Defendant’s burden to affirmatively establish that such conduct could not even “potentially” harm the Plaintiffs’ market. Defendant has not done so.

(v). *Overall Assessment*

Whatever merit there may be in Defendant’s goal of furthering access to documents incorporated into regulations, there is nothing in the Copyright Act or in court precedent to

suggest that distribution of identical copies of copyrighted works for the direct purpose of undermining Plaintiffs' ability to raise revenue can ever be a fair use. The court thus concludes that the fair use doctrine does not serve as a valid defense for Defendant's conduct.

Therefore, the court finds that the ASTM Plaintiffs' motion for summary judgment as to their copyright infringement claim is GRANTED, and the AERA Plaintiffs' motion for summary judgment as to their copyright infringement claim is also GRANTED. Defendant's cross-motions on copyright infringement are both DENIED.

B. Contributory Copyright Infringement

AERA Plaintiffs additionally move for summary judgment on their contributory copyright infringement claim.⁸ Establishing proof of contributory infringement requires a party to demonstrate that the actor was "intentionally inducing or encouraging direct infringement." *MGM Studios, Inc. v. Grokster, Ltd.*, 545 U.S. 913, 930 (2005). Plaintiffs⁹ must show (1) direct infringement by third parties; (2) that Defendant knew that third parties were directly infringing; and (3) that Defendant substantially participated in that direct infringement. *Rundquist v. Vapiano SE*, 798 F. Supp. 2d 102, 126 (D.D.C. 2011). "Merely supplying the means to accomplish an infringing activity cannot give rise to the imposition of liability for contributory copyright infringement." *Newborn v. Yahoo!, Inc.*, 391 F. Supp. 2d 181, 186 (D.D.C. 2005) (internal quotation omitted).

⁸ The ASTM Plaintiffs initially brought a separate claim for contributory copyright infringement, but did not include that claim in their motion for summary judgment. Counsel for ASTM Plaintiffs stated at oral argument that they believed the remedy for their infringement claim covered any potential remedy for their contributory copyright claim. (Tr. of Motions Hearing at 122:1-7).

⁹ Because ASTM Plaintiffs did not move for summary judgment on their contributory copyright claim, for this section the court will use "Plaintiffs" to refer to AERA Plaintiffs.

To establish direct infringement by third parties, Plaintiffs must demonstrate “(1) which specific original works form the subject of the copyright claim; (2) that the plaintiff owns the copyrights in those works; (3) that the copyrights have been registered in accordance with the statute; and (4) by what acts [and] during what time the defendant infringed the copyright.” *Id.* (quoting *Home & Nature, Inc. v. Sherman Specialty Co.*, 322 F. Supp. 2d 260, 266 (E.D.N.Y. 2004)). As discussed above in section III(A), these first three elements have been satisfied. On the fourth element, Plaintiffs must show that a third party infringed its copyrights by violating their exclusive rights under 17 U.S.C. § 106, including reproduction, preparation of derivative works, distribution, or public display. *See Home & Nature*, 322 F. Supp. 2d at 267. However, Plaintiffs only present evidence that the 1999 Standards were “accessed at least 4,164 times” on Public Resource’s website and that they were “accessed on the Internet Archive . . . website 1,290 times.” (AERA PSMF ¶¶ 85–86). Without more, there is no basis for the court to determine that accessing a website is equivalent to copying or violating any of the exclusive rights under § 106. Plaintiffs also assert that “some” individuals “obtained” the standards, but their only evidence of this is a redacted e-mail in which an individual states “[O]ne of my students showed up for class this semester and told me that he/she didn’t purchase a copy of the Standards (I require them as a text for one of my courses) because ‘they are available for free on line’ and they showed me the following site.” (Exl. LLL to Decl. of Laress Wise (AERA ECF No. 60-75)). Even if such a statement were ultimately determined to be admissible for the truth of the matter that the student did not purchase the Standards, it still does not establish that the student downloaded or otherwise copied the 1999 Standards from Defendant’s website.¹⁰

¹⁰ The court recognizes that acquiring evidence of downloads may be difficult. Carl Malamud, Public Resource’s CEO, testified at deposition that “I don’t know about downloads. It’s technically impossible to determine that.” (Ex. A to Hudis Decl. at 347:6–8 (AERA ECF No.

In their Reply Brief, Plaintiffs also point to the possibility that simply browsing a website causes a copy of the material on the website to be automatically copied to the computer's random access memory or RAM. *See CoStar Realty Info., Inc. v. Field*, 737 F. Supp. 2d 496, 507 (D. Md. 2010) (analyzing copyright claim involving cache copies of websites in computer's RAM); *Ticketmaster, LLC v. RMG Techs., Inc.*, 507 F. Supp. 2d 1096, 1104–05 (C.D. Cal. 2007) (same). While this may be correct, the fact remains that Plaintiffs have put forth no actual evidence that even one of the 4,164 accesses resulted in such a copying to a computer's RAM, and without such evidence, Plaintiffs cannot meet their burden on their contributory copyright claim at the summary judgment stage.

The second two factors require Plaintiffs to establish that Defendant knew that third parties were engaged in direct infringement and that it substantially participated in such infringement. Plaintiffs may demonstrate knowledge by showing that Defendant was notified of the third party direct infringement or that it “willfully blind[ed] itself to such infringing uses.” *Newborn*, 391 F. Supp. 2d at 186. On this factor, Plaintiffs again fall short, relying on the fact that they asked Defendant to remove the 1999 Standards from its website and Defendant refused to do so, as well as evidence that Defendant did not track or prevent downloads of the 1999 Standards from its website. Without more, this is insufficient to establish that Defendant knew that third parties were infringing the Plaintiffs' copyrights.

Similarly, Plaintiffs have not presented sufficient evidence on the substantial participation factor. While it is undisputed that Defendant posted the 1999 Standards on its website to enable greater access for those wishing to read them, because Plaintiffs have not

60-4)). However, this does not relieve Plaintiffs of the burden of establishing some evidence demonstrating direct infringement by third parties.

established any actual third party direct infringement, there is insufficient evidence that Defendant substantially participated in that infringement.

Therefore, the court DENIES Plaintiffs' motion for summary judgment as to its contributory copyright claim, and also DENIES Defendant's motion for summary judgment on this claim, as there exists questions of fact as to any third party infringement, Defendant's knowledge, and Defendant's participation.

C. Trademark Infringement Claims

ASTM Plaintiffs additionally moved for summary judgment on their trademark infringement, unfair competition and false designation of origin, and common law trademark infringement claims, and Defendant cross-moved for summary judgment on these claims as well.¹¹ Trademark law is governed by the Lanham Act, 15 U.S.C. § 1051 *et seq.*, which provides that:

(1) Any person who shall, without the consent of the registrant . . . (a) use in commerce any reproduction, counterfeit, copy, or colorable imitation of a registered mark in connection with the sale, offering for sale, distribution, or advertising of any goods or services on or in connection with which such use is likely to cause confusion, or to cause mistake, or to deceive . . . shall be liable in a civil action by the registrant for the remedies hereinafter provided.

15 U.S.C. § 1114(1). In order to prevail on a trademark infringement claim under the Lanham Act, Plaintiffs¹² "must show (1) that [they] own[] a valid trademark, (2) that [their] trademark is distinctive or has acquired a secondary meaning, and (3) that there is a substantial likelihood of confusion between the plaintiff[s'] mark and the alleged infringer's mark." *Globalaw Ltd. v. Carmon & Carmon Law Office*, 452 F. Supp. 2d 1, 26 (D.D.C. 2006); *AARP v. Sycle*, 991 F.

¹¹ The AERA Plaintiffs did not bring a trademark claim, and so this section applies only to ASTM Plaintiffs.

¹² As in the preceding section, because only ASTM Plaintiffs moved for summary judgment on this claim, the court will refer to them here as Plaintiffs.

Supp. 2d 224, 229 (D.D.C. 2013) (same). Common law claims are analyzed under the same standard. *See AARP*, 991 F. Supp. 2d at 229 (citing *Breaking the Chain Found., Inc. v. Capitol Educ. Support, Inc.*, 589 F.Supp.2d 25, 29 (D.D.C. 2008)). In order for conduct to be considered infringing, there must be a “use in commerce.” 15 U.S.C. §§ 1114(1), 1125(a)(1).

Defendant cites *Dastar Corp. v. Twentieth Century Fox Film Corp.*, to discourage the court from considering Plaintiffs’ trademark claims on the principle that courts should not “misuse or over-exten[d] [] trademark and related protections into areas traditionally occupied by patent or copyright.” 539 U.S. 23, 34 (2003). *Dastar* held that a plaintiff could not bring a false designation of origin trademark claim against a defendant who was distributing content that had become part of the public domain because the Lanham Act only offers protection “to the producer of the tangible goods that are offered for sale, and not to the author of any idea, concept, or communication embodied in those goods.” *Id.* at 37. Unlike in *Dastar*, Plaintiffs here have an independent basis for claiming that Defendant infringed their trademarks, separate from their copyright infringement claims: Defendant distributed standards online bearing Plaintiffs’ registered trademarks and logos, and Plaintiffs argue that this unauthorized use of their marks will confuse consumers and falsely signal that Plaintiffs are the origin of the standards distributed on Defendant’s website rather than Defendant. While the remedy sought for Plaintiffs’ copyright claim—an injunction barring Defendant from displaying Plaintiffs’ standards online—may be broad enough to subsume a remedy for their trademark claims, the claims are based on independent arguments, and are therefore the type that *Dastar* found to be appropriate for consideration under the Lanham Act.

The court must therefore consider whether Plaintiffs own a valid, protectable trademark, whether Defendant engaged in an unauthorized use in commerce, whether there is a likelihood of

consumer confusion, and whether Defendant's fair use defense permits its use of the trademarks.

1. Valid, Protectable Trademark

Under the Lanham Act, any registration of a trademark "shall be prima facie evidence of the validity of the registered mark and of the registration of the mark, of the owner's ownership of the mark, and of the owner's exclusive right to use the registered mark in commerce." 15 U.S.C. § 1057(b). The record indicates that Plaintiffs own valid trademarks of the trademarks asserted in this case, and they have federal trademark registrations for each of the asserted marks.¹³ Thus, Plaintiffs have established a prima facie showing of ownership. Defendant offers no evidence to demonstrate that Plaintiffs do not own the trademarks, and therefore the court concludes that Plaintiffs are the owners of these marks.

The trademarks must also be "valid." To establish validity, Plaintiffs must prove that the designation is inherently distinctive or that it has become distinctive by acquiring secondary meaning. *See Two Pesos, Inc. v. Taco Cabana, Inc.*, 505 U.S. 763, 769 (1992); *Globalaw*, 452 F. Supp. 2d at 26. However, Plaintiffs' trademark registrations create a rebuttable presumption of "inherent distinctiveness or secondary meaning." Restatement (Third) of Unfair Competition § 13 cmt. a (1995). Additionally, the Lanham Act provides that if the trademark has been "in continuous use for five years subsequent to registration" then the marks become "incontestable," 15 U.S.C. § 1065, meaning the registration "shall be conclusive evidence of the validity of the registered mark," including as to whether it is distinctive or has a secondary meaning, 15 U.S.C. § 1115(b); *see also* Restatement (Third) of Unfair Competition § 13 cmt. a (1995). Plaintiffs

¹³ (PSMF ¶¶ 77 (trademark registration for "ASTM"), 78 (trademark registration for "ASTM International" and logo), 79 (trademark registration for ASTM logo), 123 (trademark registration for "National Fire Protection Association" and "NFPA"), 124 (trademark registration for NFPA logo), 126 (trademark registration for NEC logo), 149 (trademark registration for ASHRAE logo), 151 (trademark registration for additional ASHRAE logo)).

provided evidence that some of their trademarks have become incontestable and that they all are distinctive. (See PSMF ¶¶ 77, 78, 124, 125, 126, 150). Defendant offered no evidence to dispute the validity of the trademarks. Thus, Plaintiffs have sufficiently established their ownership of valid trademarks.

2. Defendant's Unauthorized Use in Commerce

Plaintiffs must also demonstrate that Defendant used their trademarks “in commerce.” 15 U.S.C. §§ 1114(1), 1125(a)(1). Under the Lanham Act, “[c]ommerce’ means all commerce which may be lawfully regulated by Congress.” 15 U.S.C. § 1127. Therefore, to satisfy this requirement, Plaintiffs need not demonstrate actual use or intended use in interstate commerce. See *United We Stand Am., Inc. v. United We Stand, Am. N.Y., Inc.*, 128 F.3d 86, 92 (2d Cir. 1997) (the commerce requirement “reflects Congress’s intent to legislate to the limits of its authority under the Commerce Clause, rather than to limit the Lanham Act to profit-seeking uses of a trademark”). Distribution on the Internet can satisfy the “use in commerce” requirement. See *Intermatic, Inc. v. Toebben*, 947 F. Supp. 1227, 1239 (N.D. Ill. 1996). Thus, Defendant’s online posting of the standards bearing Plaintiffs’ trademarks satisfies this requirement.

This use in commerce must further be “without the consent of the registrant.” 15 U.S.C. § 1114(1). It is undisputed that Plaintiffs did not authorize Defendant’s use of Plaintiffs’ trademarks in commerce. Defendant instead argues that its use was permitted under the “first sale doctrine,” which holds that a trademark owner cannot control what happens to its products after the first sale. However, the court finds this doctrine a poor fit here, where it is undisputed that Defendant did not redistribute the physical copies of Plaintiffs’ standards that it purchased but rather created reproductions through scanning and re-typing, with resultant errors and differences. See *Australian Gold, Inc. v. Hatfield*, 436 F.3d 1228, 1241 (10th Cir. 2006) (noting

that the first sale doctrine is appropriate only when the actor “does no more than stock, display, and resell a producer’s product under the producer’s trademark”); *Capitol Records, LLC v. DeRigi Inc.*, 934 F. Supp. 2d 640, 655 (S.D.N.Y. 2013) (in the copyright context, the first sale doctrine was “impossible” to apply because that defense is limited to when an actor distributes the original material item, not when she distributes reproductions).

Moreover, Defendant’s quality control standards in reproducing Plaintiffs’ standards were outside of Plaintiffs’ control and below that sufficient to deem the standards it distributed “genuine” products, meaning the first sale doctrine cannot protect Defendant’s conduct. *See Polymer Tech. Corp. v. Mimran*, 37 F.3d 74, 78 (2d Cir. 1994); *Shell Oil Co. v. Commercial Petroleum, Inc.*, 928 F.2d 104, 107 (4th Cir. 1991); *El Greco Leather Prods. Co. v. Shoe World*, 806 F.2d 392, 395 (2d Cir. 1986); *see also* 4 McCarthy on Trademarks and Unfair Competition § 25.42 (4th ed.). Although Defendant argues that there are no material differences between Plaintiffs’ standards and Defendant’s reproductions, Plaintiffs need not show that Defendant’s reproduced standards were defective, only that they were unable to exercise quality control. *See Zino Davidoff SA v. CVS Corp.*, 571 F.3d 238, 243 (2d Cir. 2009). The claim survives because “the interference with the trademark holder’s legitimate steps to control quality unreasonably subjects the trademark holder to the risk of injury to the reputation of its mark.” *Id.* Plaintiffs have established that Defendant’s quality control standards, including “double-keying” the standards, a process involving two separate individuals typing the same material and comparing the results to determine the existence of any errors, resulted in missing or inverted pages and typographical errors in numerical values or formulas. (ASTM PSMF ¶¶ 190, 214–15). Because the standards are therefore not “genuine,” the first sale doctrine does not apply, and Plaintiffs have established that Defendant used its trademarks in commerce without authorization.

3. Likelihood of Confusion

Next, the court must assess whether there is a substantial likelihood of consumer confusion. This hinges on whether “an appreciable number of ordinarily prudent customers are likely to be misled, or simply confused, as to the source” of the copied standards that Public Resource posted online. *Globalaw*, 452 F. Supp. 2d at 47.

Plaintiffs argue that consumers will be confused both in thinking that Plaintiffs authorized Defendant’s posting of the standards, and that Plaintiffs produced the PDF and HTML versions of the standards that Defendant posted. *See Am Ass’n for the Advancement of Science v. Hearst Corp.*, 498 F. Supp. 244, 258 (D.D.C. 1980) (noting that both are appropriate bases for a confusion argument). Courts in this Circuit consider approximately seven factors in assessing the likelihood of confusion, though none is individually determinative. *Globalaw*, 452 F. Supp. 2d at 48. They include: (1) the strength of the Plaintiffs’ marks; (2) the degree of similarity between the marks; (3) the proximity of the products; (4) evidence of actual confusion; (5) Defendant’s purpose or reciprocal good faith in adopting its own mark; (6) the quality of Defendant’s product; and (7) the sophistication of the buyers. *Id.* Several courts in other Circuits have determined that when a defendant uses an identical mark on a similar product, consideration of all the factors is not necessary. *See Int’l Cosmetics Exch., Inc. v. Gapardis Health & Beauty, Inc.*, 303 F.3d 1242, 1248-49 (11th Cir. 2002); *Wynn Oil Co. v. Thomas*, 839 F.2d 1183, 1190-91 (6th Cir. 1988).

Defendant does not dispute that Plaintiffs’ marks are “strong,” that Defendant used marks and logos that are identical to Plaintiffs’ marks and logos when it posted the Plaintiffs’ standards online, and that the standards it applied the marks and logos to were identical or nearly identical to Plaintiffs’. (PSMF ¶¶ 210–11; Def. Br. at 65). Moreover, it is undisputed that the standards

distributed by Plaintiffs and by Defendant were in close proximity, since Defendant offered the standards in the same market as Plaintiff—i.e., the Internet—as a free alternative to purchasing the standards from Plaintiffs directly. *See* Restatement (Third) of Unfair Competition § 21 cmt. j (1995) (“[T]he use of similar designations on goods that are used together, or that perform the same function, or that are of the same general class, is more likely to cause confusion than is a use in connection with goods used for different purposes, or in different contexts, or by different purchasers.”). It is also undisputed that Defendant intended for individuals to consider that the standards were identical. (PSMF ¶ 213).

Defendant argues that despite these undisputed facts, consumers would not be confused because it posts disclaimers that it claims “adequately informed consumers” so that “no reasonable consumer would mistake [its cover page] as part of the original document.” (Def. Reply at 28 (referring to the PDF disclaimer at ASTM ECF No. 118-12, Ex. 16)). Defendant also argues that the PDF versions it posted “look like scans of physical documents,” and that the “preamble for the .html standards informs reasonable consumers that Public Resource has provided the transcription.” (*Id.* (referring to the HTML disclaimer at ASTM ECF No. 118-13, Ex. 26)).¹⁴ Here, Defendant’s disclaimer on the PDF reads in full:

In order to promote public education and public safety, equal justice for all, a better informed citizenry, the rule of law, world trade and world peace, this legal document is hereby made available on a noncommercial basis, as it is the right of all humans to know and speak the laws that govern them.

(ASTM ECF No. 118-12, Ex. 16). The disclaimer on the HTML versions contains similar

¹⁴ Defendant cites to *Prestonettes, Inc. v. Coty*, 264 U.S. 359, 369 (1924), in support of its argument that a disclaimer is sufficient to inform consumers that it has repackaged or changed the original. The facts of that case do not support Defendant’s position, as the disclaimer in that case stated clearly that the distributor was not connected with the producer and that the producer’s product was merely a constituent part of the distributor’s new product. *Coty*, 264 U.S. at 367.

language. (ASTM ECF No. 118-13, Ex. 26). These disclaimers do not mention Defendant's creation of the reproductions, Plaintiffs' lack of association or authorization, or that they are even reproductions or transcriptions, and can hardly be called disclaimers at all. Moreover, Defendant's assertion that the PDFs "look like scans" offers no assistance to a consumer looking at the standard, as they would have no way to determine whether the Plaintiffs or Defendant created the scan. While Defendant has since adopted a more thorough disclaimer that includes information about Public Resource's retyping of the HTML versions and the possibility of errors (DSMF ¶ 169), it did not begin using that disclaimer until 2015, after the start of this litigation. (Decl. of Carl Malamud ¶ 31 (ASTM ECF No. 122-8)).

The parties have presented no evidence to establish the existence or non-existence of actual consumer confusion. While such evidence is not required, without it summary judgment on consumer confusion, and trademark infringement more generally, is a difficult call. However, the facts here present nearly as black-and-white a case as possible. A consumer in the market for one of Plaintiffs' voluntary consensus standards may encounter them on Plaintiffs' websites for purchase, or on Defendant's website for free download. Because Defendant has intentionally created a copy that is meant to appear identical, including use of Plaintiffs' trademarks, then that consumer may download that standard for free from Defendant without knowing that it is not created by the Plaintiffs and may contain missing pages or typographical errors leading to inaccurate values for measurements. In short, Plaintiffs have presented enough evidence for the court to conclude that there is no genuine dispute on the factual issue of whether consumer confusion is likely.

4. Defendant's Nominative Fair Use Defense

While Plaintiffs have successfully established Defendant's infringing use of their

trademarks, Defendant argues that its use of Plaintiffs' trademarks is "nominative fair use."

Under this defense, Defendant must demonstrate that its use of Plaintiffs' trademarks was necessary to describe their standards; that it only used as much of the marks as was reasonably necessary to identify the standards; and that it has not done anything to suggest sponsorship or endorsement by the Plaintiffs or to inaccurately describe the relationship between the parties' products. *See Rosetta Stone Ltd. v. Google, Inc.*, 676 F.3d 144, 154 (4th Cir. 2012). Nominative fair use by a defendant makes it "clear to consumers that the plaintiff, not the defendant, is the source of the trademarked product or service." *Century 21 Real Estate Corp. v. Lendingtree, Inc.*, 425 F.3d 211, 220 (3d Cir. 2005). Thus, if Defendant's use is nominative fair use, it would not create "confusion about the source of [the] defendant's product." *Tiffany (NJ) Inc. v. eBay Inc.*, 600 F.3d 93, 102 (2d Cir. 2010) (alteration in original). On this point, the parties argue past each other. Defendant believes no consumer would believe that Defendant, rather than Plaintiffs, was the source of the standards, and so its use is a fair use. Plaintiffs argue that Defendant's use cannot be fair precisely *because* consumers would believe that Plaintiffs were the source of the reproduced standards, which they are not. However, because the court has already determined that consumer confusion as to the source of the trademarked standards is likely, the nominative fair use defense is inapplicable and the court need not assess each of the *Rosetta Stone* factors listed above.

The court therefore finds that Defendant engaged in trademark infringement by its use of Plaintiffs' registered trademarks, and Plaintiffs' motion for summary judgment on their trademark claims is GRANTED and Defendant's cross-motion is DENIED.

IV. REMEDIES

Both ASTM Plaintiffs and AERA Plaintiffs seek a permanent injunction barring

Defendant from distributing, displaying, or creating derivative works from their copyrighted standards and, in the case of ASTM Plaintiffs, their trademarks, which this court has authority to grant under 17 U.S.C. § 502(a) (Copyright Act) and 15 U.S.C. § 1116 (Lanham Act). Plaintiffs must establish (1) irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for their injury; (3) that a remedy in equity is warranted after considering the balance of hardships; and (4) that the public interest would not be disserved by a permanent injunction. *See eBay Inc. v. MercExchange, LLC*, 547 U.S. 388, 391 (2006).

A. Irreparable Injury

The ASTM Plaintiffs assert that they will face three separate irreparable injuries if Defendant is permitted to continue distribution of Plaintiffs' standards, including substantial declines in revenue that may cause their business models to change, the loss of the exclusive rights under the Copyright Act to exclude others from distributing, reproducing, or displaying their protected works, and the loss of control of the goodwill associated with their trademarks. AERA Plaintiffs similarly assert that they will face three separate irreparable injuries if Defendant is permitted to continue distribution of Plaintiffs' standards, including loss of business opportunities, the loss of the exclusive rights under the Copyright Act to exclude others from distributing, reproducing, or displaying their protected works, and the adverse effect on Plaintiffs' efforts to create further standards.

It is well established that the threat of continuing copyright infringement justifies granting a permanent injunction. *See Walt Disney Co. v. Powell*, 897 F.2d 565, 567 (D.C. Cir. 1990) ("When a [] plaintiff has established a threat of continuing infringement, he is entitled to an injunction."); *Hanley-Wood LLC v. Hanley Wood LLC*, 783 F. Supp. 2d 147, 151 (D.D.C. 2011); *Breaking the Chain Found. v. Capital Educ. Support, Inc.*, 589 F. Supp. 2d 25, 30

(D.D.C. 2008). While a court should not automatically issue an injunction after it finds there was past copyright or trademark infringement, here Plaintiffs’ alleged irreparable injury is not the past infringement but the threat of future infringement. Defendant has not provided any assurances that it would cease posting of Plaintiffs’ standards—indeed, it is undisputed that during the course of this litigation, Public Resource posted online versions of the ASTM Plaintiffs’ other standards not involved in this litigation. (PSMF ¶ 235). Moreover, Defendant’s counsel at oral argument admitted that Defendant would post the AERA Plaintiffs’ 2014 Standards if they were incorporated by reference into federal regulations in the future. (Tr. of Motions Hearing at 75:24–76:2). The court thus determines that the continued threat of infringement is sufficient to weigh in favor of an injunction.

B. Adequacy of Monetary Damages

Plaintiffs argue that because damages here are difficult to quantify and Defendant may be unable to pay damages, then legal remedies are inadequate. *See Fox Television Stations, Inc. v. FilmOn X LLC*, 966 F. Supp. 2d. 30, 50 (D.D.C. 2013). The evidence shows that while the Plaintiffs’ standards were accessed thousands of times on Defendant’s website, Defendant does not track information that would be helpful in calculating damages, such as how many of those accesses actually led to downloads, and whether those downloads were in lieu of purchases. Moreover, Defendant did not dispute that it has “extremely limited financial resources available to pay any damages award” and that in 2014 it “generated under \$100,000 in operating income and had \$248,000 in total net assets.” (ASTM PSMF ¶¶ 272–73). Given that the Copyright Act provides for statutory damages ranging from \$750 to \$30,000 for each of the standards at issue in the overall case, or even up to \$150,000 per infringement if Plaintiffs were to later prove that infringement was committed willfully, Defendant’s potential inability to pay is surely a factor

weighing towards equitable relief. *See* 17 U.S.C. § 504(c)(1)–(2).

C. Balance of Hardships & Public Interest

The court must weigh the likely harms faced by Plaintiffs described above with any harms faced by Defendant if an injunction is imposed. Here, Defendant’s CEO Carl Malamud was asked in his ASTM deposition what financial impact an injunction barring posting of the standards would have on Public Resource, and he responded “probably none.” (Malamud Dep. at 219:22–220:4 (Ex. 3 to Rubel Decl. (ASTM ECF No. 118-12))). The only harm Mr. Malamud identified was that “one hates to have wasted that [] effort” that went into posting the standards online. (*Id.*). Without evidence of any additional harms, this factor weighs strongly in favor of an injunction.

Additionally, the public must not be disserved by the issuance of an injunction. Here, the public interest is served by the policy interests that underlie the Copyright Act itself, namely the protection of financial incentives for the continued creation of valuable works, and the continued value in maintaining the public-private system in place in the U.S. to ensure continued development of technical standards.

Taken together, the court finds that injunctive relief is appropriate and that Defendant should be permanently barred from violating any of Plaintiffs’ exclusive copyrights, including distributing, displaying, reproducing, or creating derivative works in the nine standards on which ASTM Plaintiffs moved for summary judgment and AERA Plaintiffs’ 1999 Standards, as well as barred from any use of ASTM Plaintiffs’ trademarks in connection with the posting of these standards online or elsewhere.

V. CONCLUSION

For the reasons set forth above, ASTM Plaintiffs’ Motion is GRANTED, AERA

Plaintiffs' Motion is GRANTED IN PART and DENIED IN PART, and Defendant's Cross-Motions are DENIED.

Date: February 2, 2017

Tanya S. Chutkan

TANYA S. CHUTKAN

United States District Judge

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

AMERICAN EDUCATIONAL
RESEARCH ASSOCIATION, INC. *et al.*,

Plaintiffs,

v.

PUBLIC.RESOURCE.ORG, INC.,

Defendant.

Case No. 14-cv-0857 (TSC)

ORDER

Upon consideration of the parties' motions, and for the reasons set forth in the court's Memorandum Opinion, Plaintiffs' motion is GRANTED IN PART and DENIED IN PART and Defendant's motion is DENIED.

It is hereby ORDERED that Defendant is permanently enjoined from all unauthorized use, including through reproduction, display, distribution, or creation of derivative works, of the Standards for Educational and Psychological Testing, 1999 edition.

Defendant is FURTHER ORDERED to remove all versions of this standard from its website and any other website within its possession, custody, or control within five days.

Date: February 2, 2017

Tanya S. Chutkan

TANYA S. CHUTKAN

United States District Judge

JA3456

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

AMERICAN EDUCATIONAL RESEARCH)	
ASSOCIATION, INC., AMERICAN	)	Civil Action No. 1:14-cv-00857-TSC-DAR
PSYCHOLOGICAL ASSOCIATION, INC.,)	
and NATIONAL COUNCIL ON)	
MEASUREMENT IN EDUCATION, INC.,)	
	)	PLAINTIFFS' MOTION FOR
	)	CLARIFICATION OF THE COURT'S
	)	ORDER DATED FEBRUARY 2, 2017
Plaintiffs/Counterclaim-Defendants,	)	AND, IN THE ALTERNATIVE,
	)	CONSENT MOTION FOR
v.	)	CONTINUANCE OF DEADLINES
	)	FOR A MOTION FOR ATTORNEYS'
PUBLIC.RESOURCE.ORG, INC.,	)	FEEES AND BILL OF
	)	COSTS, WITH STATEMENT OF
Defendant/Counterclaim-Plaintiff.	)	POINTS AND AUTHORITIES
)	

Plaintiffs, American Educational Research Association, Inc. (“AERA”), American Psychological Association, Inc. (“APA”) and National Council on Measurement in Education, Inc. (“NCME”) (collectively, “Plaintiffs”) move herein for Clarification of the Court’s Order Dated February 2, 2017 (the “Order” - Dkt. No. 118) and, in the alternative, for Continuance of the Deadlines for File a Motion for Attorney’s Fees and a Bill of Costs. Counsel for the parties have met and conferred pursuant to Local Rule 7(m), and counsel for Defendant has consented to the enlargement of time as requested herein.

STATEMENT OF POINTS AND AUTHORITIES

Plaintiffs seek clarification as to whether the Order triggered the deadlines under Federal Rule of Civil Procedure 54(d) for filing motions for fees and costs, and, if so, to request a continuance of the deadlines until the matter has been fully and finally resolved and a final judgment has been entered by the Court. The potential deadlines for the motion for fees and costs are February 16 and February 23, respectively. In support of this Motion, Plaintiffs state as follows:

1. On February 2, 2017, this Court entered the Order granting in part and denying in part Plaintiffs' Motion for Summary Judgment. Specifically, the Court directed that:

It is hereby ORDERED that Defendant is permanently enjoined from all unauthorized use, including through reproduction, display, distribution, or creation of derivative works, of the Standards for Educational and Psychological Testing, 1999 edition.

Defendant is FURTHER ORDERED to remove all versions of this standard from its website and any other website within its possession, custody, or control within five days. [Dkt. 118]

2. The Copyright Act permits a party to seek recovery of costs and reasonable attorneys' fees if it prevails in an action under the Copyright Act. *See* 17 U.S.C. §505 (“[T]he court in its discretion may allow the recovery of full costs by or against any party other than the United States or an officer thereof. Except as otherwise provided by this title, the court may also award a reasonable attorney’s fee to the prevailing party as part of the costs.”).

3. Because Plaintiffs prevailed on summary judgment on Count 1, their claim of direct copyright infringement, and obtained a permanent injunction against Defendant for unauthorized use of Plaintiffs' copyrighted work, Plaintiffs would be permitted, pursuant to the Copyright Act, to seek their reasonable attorneys' fees and costs as to Count 1.

4. However, the Order only granted in part Plaintiffs' Motion for Summary Judgment and did not dispose of all claims in this action, leaving open Count 2 (contributory infringement) and Defendant's Counterclaim. *See* Fed. R. Civ. P. 54(b) (“When an action presents more than one claim for relief . . . , the court may direct entry of a final judgment as to one or more, but fewer than all, claims . . . only if the court expressly determines that there is no just reason for delay. ***Otherwise any order or other decision, however designated, that adjudicates fewer than all claims . . . does not end the litigation as to any of the claims . . .*** and may be revised at any time before the entry of a judgment adjudicating all claims . . .”).

(emphasis added).

5. Rule 54(b) counsels that filing a motion for attorneys’ fees and bill of costs on an order partially granting a motion for summary judgment is premature. However, a “judgment” is defined in Fed. R. Civ. P. 54(a) as “a decree and any order *from which an appeal lies.*” (emphasis added). Pursuant to 28 U.S.C. § 1292(a)(1), an interlocutory order may be appealed from where it involves the “granting, continuing, modifying, refusing or dissolving injunctions, or refusing to dissolve or modify injunctions.” *See* 28 U.S.C. § 1292(a)(1) (“[T]he courts of appeals shall have jurisdiction of appeals from . . . interlocutory orders of the district courts of the United States . . . or of the judges thereof, granting, continuing, modifying, refusing or dissolving injunctions, or refusing to dissolve or modify injunctions . . .”).

6. In granting an injunction, the Order in this case could under one lens be viewed to meet the definitional requirement of a “judgment” under Fed. R. Civ. P. 54(a), triggering the various deadlines outlined in Fed. R. Civ. P. 54(d) to file a motion for attorneys’ fees and bill of costs.

7. However, because the Order decided fewer than all claims and did not constitute a final judgment, thereby making Rule 54(d) relief premature until a final judgment is entered by the Court, Plaintiffs request confirmation from the Court that the Order is not a “judgment” that triggers the Rule 54(d) deadlines. Otherwise, Plaintiffs’ motion for fees and bill of costs encourage piecemeal litigation, given that claims in the case remain outstanding, and would require the breaking out of time and costs spend on a single count within the Complaint.

8. Should the Court determine that the Order is a “judgment” as defined under Fed. R. Civ. P. 54(a) upon which Plaintiffs may file a motion for attorneys’ fees and bill of costs pursuant to Fed. R. Civ. P. 54(d), Plaintiffs request that the deadlines pertaining to fees and costs

be continued until the matter has been fully and finally resolved and a final judgment has been entered by the Court.¹

WHEREFORE, Plaintiffs American Educational Research Association, Inc., American Psychological Association, Inc., and National Council on Measurement in Education, Inc. respectfully request clarification from the Court confirming that the Order is not a judgment upon which Plaintiffs may seek attorneys' fees and costs pursuant to Federal Rule of Civil Procedure 54(d). If the Court views the Order as a judgment upon which Plaintiffs may seek attorneys' fees and costs pursuant to Federal Rule of Civil Procedure 54(d), Plaintiffs respectfully request that the deadlines to file any motion for attorneys' fees and bill of costs be continued until the matter has been fully and finally resolved and a final judgment has been entered by the Court, and to grant such other relief that this Court deems just and appropriate.

Respectfully submitted,

QUARLES & BRADY LLP

Dated: February 10, 2017

By: /s/ Jonathan Hudis
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Counsel for Plaintiffs American Educational Research Association, Inc., American Psychological Association, Inc., and National Council on Measurement in Education, Inc.

¹ Defendant was cited in an article published by Law360 dated February 3, 2017, attached hereto as Exhibit A, as having "said [that Public.Resource.Org] planned to appeal the ruling" dated February 2, 2017. *See* Exhibit A, ll. 21-23.

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

AMERICAN EDUCATIONAL RESEARCH
ASSOCIATION, INC.;

AMERICAN PSYCHOLOGICAL ASSOCIATION,
INC.; and

NATIONAL COUNCIL ON MEASUREMENT IN
EDUCATION, INC.,

Plaintiffs/Counter-Defendants,

v.

PUBLIC.RESOURCE.ORG, INC.

Defendant/Counterclaimant.

Case No. 1:14-CV-00857-TSC-DAR

**NOTICE OF APPEAL BY
DEFENDANT-COUNTERCLAIMANT
PUBLIC.RESOURCE.ORG, INC.**

Action Filed: May 23, 2014

Pursuant to 28 U.S.C. § 1292(a)(1), Defendant and Counterclaimant
Public.Resource.Org, Inc. hereby gives notice of its appeal to the United States Court of Appeals
for the District of Columbia Circuit from the order of February 2, 2017, Dkt. no. 118,
permanently enjoining Public.Resource.Org and granting in part Plaintiffs' Motion for Summary
Judgment and Entry of a Permanent Injunction, pursuant to this Court's decision in the
memorandum opinion of the same date, Dkt. no. 117.

Dated: February 17, 2017

Respectfully submitted,

/s/ Andrew P. Bridges

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CERTIFICATE OF SERVICE

I hereby certify that the foregoing was electronically filed with the Clerk of the Court for the District of Columbia and served on all counsel of record via the CM/ECF system on February 17, 2017.

/s/ Andrew P. Bridges

Andrew P. Bridges